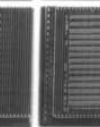
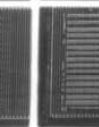
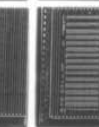
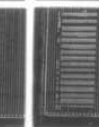
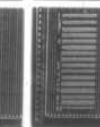
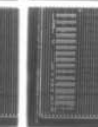
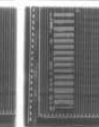
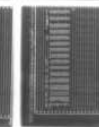
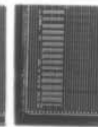
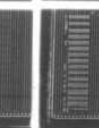
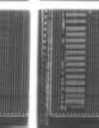
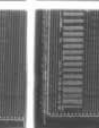
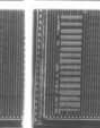
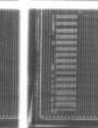
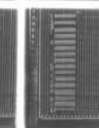
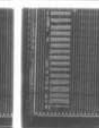
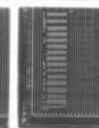
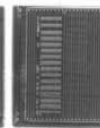
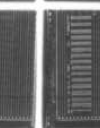
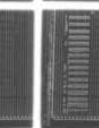
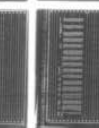
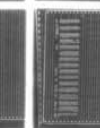
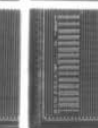
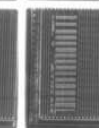
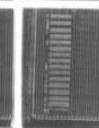
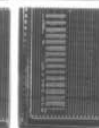
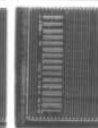
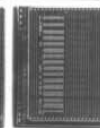
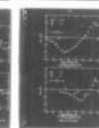
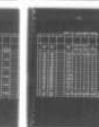
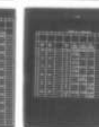


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DATA REPORT FOR A TEST PROGRAM TO STUDY
TRANSONIC FLOW FIELDS ABOUT AIRCRAFT
WITH APPLICATION TO EXTERNAL STORES

VOLUME I. - SUMMARY REPORT, TUNNEL-EMPTY
AND MACH-NUMBER SURVEY DATA, FORCE AND
MOMENT DATA, AND PRESSURE DATA

By Stanley C. Perkins, Jr.,
Stephen S. Stahara and
Michael J. Hensch

AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFSC)
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Technical Information Officer
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A test program was conducted to obtain measurements of flow velocities and static pressures in the vicinity of wing-body-store model (representative of a fighter-type aircraft) as well as surface pressures, forces, and moments on the model. Flow velocities and static pressures were also measured near the tunnel walls to provide outer flow field information. This report presents the data obtained during the test program conducted in the 4T and 16T Wind Tunnels at Arnold Engineering Development Center. The Flow-field data were obtained at Mach numbers 0.925, 0.975, and 1.025 and constitute the major part of the data. (cont)																				

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NOMENCLATURE

This section provides a list of symbols which identify various aerodynamic parameters, axis designations, subscripts, and tabulated data nomenclature.

Symbols

α_{AL}	local upwash angle, deg; $\tan^{-1}[(W_L/VM)/(U_L/VM)]$
A_W	planform area of both wings (does not include body), 0.4444 ft ²
b	wing span, 16 in.
c	local wing chord
\bar{c}	reference length for pitching moment, 5.3444 in.
C_A	axial-force coefficient, positive in the positive X direction, axial force/ $q_\infty A_W$
C_l	rolling-moment coefficient, positive left wing down as seen by pilot, rolling moment/ $q_\infty A_W b$
C_m	pitching-moment coefficient, positive nose up as seen by pilot, pitching moment/ $q_\infty A_W \bar{c}$
C_N	normal-force coefficient, positive in the positive Z direction, normal force/ $q_\infty A_W$
C_n	yawing-moment coefficient, positive nose left as seen by pilot, yawing moment/ $q_\infty A_W b$
C_p	local pressure coefficient, $(p_l - p)/q_\infty$
C_Y	side-force coefficient, positive in the positive Y direction, side force/ $q_\infty A_W$
D	probe diameter, in.
M	Mach number
p	free-stream static pressure, psfa
q	dynamic pressure, $\frac{1}{2} \rho V^2$, psf

NOMENCLATURE (Continued)

r	radius of the body, in.
Re/ft	free-stream Reynolds number per foot, ft^{-1}
SWL	local sidewash angle, deg; $\tan^{-1}[(VL/VM)/(UL/VM)]$
t	airfoil thickness, see figure 3
UL, VL, WL	local velocity components positive in the positive X, Y, and Z directions, respectively, ft/sec
V	total velocity, ft/sec
VM	free-stream velocity, ft/sec
X, Y, Z	body-fixed Cartesian coordinates with origin coincident with the aircraft model nose at all angles of attack, see figure 6(a)
XT, YT, ZT	tunnel-fixed Cartesian coordinates with origin coincident with the aircraft model nose at zero angle of attack, see figure 6(b)
Y_1, Z_1	coordinates of wing trailing edge at the wing root, in.; see figure 10
Y_2, Z_2	coordinates of wing trailing edge at the wing tip, in.; see figure 10
α	angle of attack of model, angle between body axis and tunnel axis as defined in figure 7
α_{probe}	angle of attack of probe, angle between probe axis and tunnel axis
Δ	increment along XT, YT, or ZT axis, see Table II
θ	azimuthal angle in the Y-Z plane, deg; measured from the positive Y axis as shown in figure 6
ρ	mass density, slugs/ ft^3

Subscripts

l	local conditions
∞	free-stream conditions

NOMENCLATURE (Continued)

Tunnel-Empty Survey Data Tabulations

AATL	upwash angle referenced to tunnel-axis coordinates, calculated from probe measurements, deg; $\tan^{-1}(WT/VT)$
ALFA	aircraft-model angle of attack, positive nose up as seen by the pilot (nose down in tunnel), deg
CPL	local pressure coefficient calculated from probe measurements, $(PL - P)/Q$
DATE	calendar time at which data were recorded
M	wind tunnel free-stream Mach number
ML	local Mach number calculated from probe measurements
P	wind tunnel free-stream static pressure, psfa
PART	sequential indexing number for referencing data; a constant throughout each survey
PL	local static pressure calculated from probe measurements, psfa
POINT	sequential indexing number for referencing data obtained during one part; indexes each time a new set of data inputs is obtained
PT	wind tunnel free-stream total pressure, psfa
PTL	local total pressure measured by probe, psfa
Q	wind tunnel free-stream dynamic pressure, psf
REX10-6	wind tunnel free-stream unit Reynolds number, millions per foot
RUN	identifier for specific user test type
SURVEY	identifier for specific user grid-survey combination
SWTL	sidewash angle referenced to tunnel-axis coordinates, calculated from probe measurements, deg; $\tan^{-1}(VT/UT)$
TEST	alpha-numeric notation for referencing a specific test program in a specific test unit

NOMENCLATURE (Continued)

TT	wind tunnel free-stream total temperature, °F
UT,VT,WT	velocity components in the tunnel-axis X, Y, and Z directions, respectively, calculated from probe measurements, ft/sec
VM	wind tunnel free-stream velocity, ft/sec
VML	local velocity calculated from probe measurements, ft/sec
WING	wing designation used for a specific part number
XT	location of the probe in the tunnel-axis X direction
YT	location of the probe in the tunnel-axis Y direction
ZT	location of the probe in the tunnel-axis Z direction
Mach-Number Survey Data Tabulations	
AAL	local upwash angle referenced to body-axis coordinates, calculated from probe measurements, deg; $\tan^{-1}(WL/UL)$
ALFA	aircraft-model angle of attack, positive nose up as seen by the pilot (nose down in tunnel), deg
CPL	local-pressure coefficient calculated from probe measurements, $(PL - P)/Q$
DATE	calendar time at which data were recorded
M	wind tunnel free-stream Mach number
ML	local Mach number calculated from probe measurements
PART	sequential indexing number for referencing data; a constant throughout each survey
P	wind tunnel free-stream static pressure, psfa
PL	local static pressure calculated from probe measurements, psfa

NOMENCLATURE (Continued)

POINT	sequential indexing number for referencing data obtained during one part; indexes each time a new set of data inputs is obtained
PT	wind tunnel free-stream total pressure, psfa
PTL	local total pressure measured by probe, psfa
Q	wind tunnel free-stream dynamic pressure, psf
REX10-6	wind tunnel free-stream unit Reynolds number, millions per foot
RUN	identifier for specific user test type
SURVEY	identifier for specific user grid-survey combination
SWL	local sidewash angle referenced to body-axis coordinates, calculated from probe measurements, deg; $\tan^{-1}(VL/UL)$
TEST	alpha-numeric notation for referencing a specific test program in a specific test unit
TT	wind tunnel free-stream total temperature, °F
UL,VL,WL	velocity components in the body-axis X, Y, and Z directions, respectively, calculated from probe measurements, ft/sec
VM	wind tunnel free-stream velocity, ft/sec
VML	local velocity calculated from probe measurements, ft/sec
WING	wing designation used for a specific part number
X	location of the probe in the body-axis X direction
Y	location of the probe in the body-axis Y direction
Z	location of the probe in the body-axis Z direction

Force and Moment and Pressure Data Tabulations

ALFA	aircraft-model angle of attack, positive nose up as seen by the pilot (nose down in tunnel), deg
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NOMENCLATURE (Continued)

A_b	area of model base, .038785 ft ²
A_w	planform area of both wings (does not include body), 0.4444 ft ²
b	wing span, 16 in.
\bar{c}	reference length for pitching moment, 5.3444 in.
CA	axial-force coefficient measured by balance, in body coordinates; axial force/ QA_w
CAB	base axial-force coefficient in body coordinates, $(P - \bar{P}_b)A_b/QA_w$
CAF	axial-force coefficient corrected for base effects, in body coordinates, $CA - CAB$
CLL	rolling-moment coefficient in unrolled body coordinates, rolling moment/ $QA_w b$
$CLMF$	pitching-moment coefficient in unrolled body coordinates, pitching moment/ $QA_w \bar{c}$
CLN	yawing-moment coefficient in unrolled body coordinates, yawing moment/ $QA_w b$
CNF	normal-force coefficient in unrolled body coordinates, normal force/ QA_w
$CPS N$ ($N = 1, 25$)	surface-pressure coefficient at orifice N , $(PS - P)/Q$
CY	side-force coefficient, side force/ QA_w
M	wind tunnel free-stream Mach number
P	wind tunnel free-stream static pressure, psfa
\bar{P}_b	average base pressure, psfa
$PART$	sequential indexing number for referencing data; a constant throughout each sweep
PS	aircraft-model local surface pressure, psfa
PT	wind tunnel free-stream total pressure, psfa

NOMENCLATURE (Concluded)

Q	wind tunnel free-stream dynamic pressure, psf
REX10-6	wind tunnel free-stream unit Reynolds number, millions per foot
RUN	identifier for specific user test type
SURVEY	identifier for specific user grid-survey combination
TEST	alpha-numeric notation for referencing a specific test program in a specific test unit
TT	wind tunnel free-stream total temperature, °F
VM	wind tunnel free-stream velocity, ft/sec
WING	wing designation used for a specific part number

**DATA REPORT FOR A TEST PROGRAM TO STUDY
TRANSONIC FLOW FIELDS ABOUT AIRCRAFT
WITH APPLICATION TO EXTERNAL STORES**

**VOLUME I. - SUMMARY REPORT, TUNNEL-EMPTY
AND MACH-NUMBER SURVEY DATA, FORCE AND
MOMENT DATA, AND PRESSURE DATA**

1. INTRODUCTION

The test program described in this report, authorized under Air Force Contract No. F44620-75-C-0047, was conducted for the purpose of obtaining experimental measurements of flow velocities and static pressures in the vicinity of wing-body models in addition to body surface pressures and forces and moments on the models. Flow velocities and static pressures were also measured near the tunnel walls to provide outer flow field information. The test program was conducted in the 4T and 16T Wind Tunnels at Arnold Engineering Development Center at Mach numbers ranging from 0.80 to 1.15. The flow-field data were obtained at Mach numbers 0.925, 0.975, and 1.025 and constitute the major part of the data.

This report presents the data obtained during the test program. This volume, Volume I, is a summary report which gives detailed information on the test program and presents uncertainties associated with the various types of data taken in the 4T Wind Tunnel. This volume also presents tunnel-empty and Mach-number surveys, as well as tabulated force and moment and pressure data for the Mach number range 0.80 to 1.15 and angles of attack -2° , -5° , 0° , 2° and 5° . Volumes II, III, and IV present the tabulated flow-field data for the 4-percent thick wing model at Mach numbers 0.925, 0.975 and 1.025, respectively. Volume V presents the tabulated flow-field data for the 6-percent thick wing model, and Volume VI presents data obtained for the 4-percent thick wing model in the 16T Wind Tunnel.

A summary of the test data contained in each volume is presented below.

<u>Volume</u>	<u>Wind Tunnel</u>	<u>Wing</u>	<u>Test Data</u>
I	4T	None	Tunnel-empty surveys at $M_\infty = .80, .85, .90, .95, 1.0, 1.025, 1.05, 1.10, 1.15$
		4-percent	Mach-number surveys at $M_\infty = .80, .85, .90, .95, 1.0, 1.025, 1.05, 1.10, 1.15$ and $\alpha = 0^\circ$
		4-percent and 6-percent	Force and Moment and Pressure data at $M_\infty = 0.80, 0.85, 0.90, 0.925, 0.95, 0.975, 1.0, 1.025, 1.05, 1.10, 1.15$
II	4T	4-percent	Flow-field survey data at $M_\infty = 0.925$ and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
III	4T	4-percent	Flow-field survey data at $M_\infty = 0.975$ and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
IV	4T	4-percent	Flow-field survey data at $M_\infty = 1.025$ and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
V	4T	6-percent	Flow-field survey data at $M_\infty = 0.925, .975, 1.025$, and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
VI	16T	None	Tunnel-empty surveys at $M_\infty = .925, .975, 1.025$
		4-percent	Force and Moment and Pressure data at $M_\infty = .80, .85, .90, .925, .95, .975, 1.0, 1.025, 1.05, 1.10, 1.15$ and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
		4-percent	Flow-field survey data at $M_\infty = 0.925, 0.975, 1.025$ and $\alpha = 0^\circ, \pm 5^\circ$

References 1 and 2 are reports prepared by AEDC describing data reduction procedures used in the 4T and 16T Wind Tunnel facilities, respectively, to determine force and moment, pressure, and flow-field data. The data uncertainties given in this report were provided by AEDC and meet the data quality requirements that were outlined in reference 3.

2. PURPOSE AND SCOPE OF TEST PROGRAM

The purpose of the test program is to obtain experimental data which will aid in the development and evaluation of a theoretical method for predicting flow fields about three-dimensional configurations characteristic of modern fighter/bombers flying in the transonic range. The scope of the test program is to obtain data on a simplified wing-body combination with two different sets of wings at subcritical, supercritical, and supersonic speeds for several values of angle of attack. The effects of wall interference in the 4T Tunnel will also be studied by repeating several of the test conditions in the 16T Propulsion Wind Tunnel. Detailed information regarding these wind tunnels can be found in reference 4. The bulk of the testing was done in the 4T Tunnel and the data obtained from these tests comprise the major part of this data report. This volume, Volume I, summarizes the data, presents the 4T Tunnel-empty and Mach-number surveys, and presents some uncertainties associated with the data. Also, the force and moment and pressure data obtained in the 4T Tunnel are presented in this volume. The 4T Tunnel flow-field survey data are presented in Volumes II through V and all data obtained in the 16T Tunnel are presented in Volume VI.

3. TEST HARDWARE

The test installation consisted of a wing-body combination in whose proximity a flow-field survey probe was located. Flow-field survey, pressure distribution, and force and moment data were obtained for two wing-body combinations during the test program.

The flow-field survey data was obtained using the AEDC 0.25-inch diameter conical probe with a 20° semi-apex angle. The body is an aluminum fuselage which was bored out and mounted on the 1.5-inch, 500 lb. AEDC 6-1.50-1.12 M-A balance. The force and moment data on the wing-body combinations were obtained using this balance. The entire body contained 25 axially-aligned pressure orifices, 6 on the nose portion and 19 on the fuselage section, from which pressure data on the body surface were obtained.

Figure 1 shows the wing-body combination with the 4-percent wing in the 4T Tunnel with the conical flow-field probe supported on the captive trajectory system (CTS, see ref. 4). Figure 2 is a drawing of the wing-body model which includes the positions of the 25 pressure orifices along the body centerline. Sketches and coordinates of the 4-percent and 6-percent thick airfoils which were used to obtain data are given in figure 3. A detailed sketch of the entire conical flow-field probe and of the probe tip are shown in figure 4. It is also noted that 0.0035-inch, #150 Carborum grit was used on the nose tip and wing leading edges to trip the boundary layer. Figure 5 shows the positions and width of the grit for both the body nose and wings.

4. DEFINITION OF AXES

A conventional set of orthogonal body-fixed axes is used as a frame of reference for the inner flow-field surveys near the body. The origin of the wing-body combination system is at the tip of the nose, as shown in figure 6(a). The pressure orifices are on the same side that probe measurements are taken, which is on the negative Z axis side. As seen by a person positioned on the pressure orifices and looking toward the nose, the X axis is positive aft, the Y axis is positive to the left and the Z axis is positive down.

A conventional set of orthogonal tunnel-fixed axes is used as a frame of reference for the outer flow-field surveys near the

tunnel walls and is shown in figure 6(b). The origin of this reference frame is the nose of the model body when the wing-body is at an angle of attack of 0° . It is at this position that the body-fixed axes and tunnel-fixed axes coincide.

The sign convention adopted for the upwash and sidewash angles is shown in figure 7. In the figure, the wing-body is shown in the tunnel at a negative angle of attack to show the flow components with respect to the walls of the tunnel. In the body-axis system, positive angular values of sidewash and upwash correspond to positive values of their respective velocity components. As seen by a person positioned on the pressure orifices and looking forward, positive upwash is a downward flow and positive sidewash is an outward flow along the left wing panel.

5. DESCRIPTION OF TESTS

Tests for which experimental data are reported herein are of three general types: (1) flow-field survey tests, (2) pressure-distribution tests and (3) force and moment tests. The tests have been conducted at nominal free-stream Mach numbers of 0.80 to 1.15 and at a nominal Reynolds number per foot of 3.0×10^6 . Tests were conducted with a 4-percent thick and a 6-percent thick airfoil to investigate thickness effects on the flow field generated by the wing-body combination.

A note is made here with respect to the positioning of the probe. The X and XT coordinates given in the tabulated data are the axial positions of the probe static pressure orifices in the body-axis and tunnel-axis systems, respectively. The Y and Z coordinates indicate the lateral and vertical positions of the probe longitudinal axis in the body-axis coordinate systems, while YT and ZT indicate the lateral and vertical positions of the probe longitudinal axis in the tunnel-axis coordinate system.

5.1 Flow-Field Survey Tests

Flow-field survey tests were conducted with the tunnel empty and with two wing-body configurations at several angles of attack. The conical probe used in the tests was calibrated at nominal Mach numbers of 0.80, 0.85, 0.90, 1.0, 1.025, 1.05, 1.10, and 1.15. Tunnel-empty surveys were made at the same Mach numbers to investigate the uniformity of the free-stream conditions in the region of the wing-body model. Mach-number surveys were also taken in regions of particular interest with the wing-body model in the tunnel. The aforementioned conical probe was used to obtain flow-field velocity components and upwash and sidewash angles, as well as other quantities, at various locations of interest. The velocities and angles were calculated using five pressures measured with the probe. One is a total pressure, located on the tip of the probe, and the other four consist of two orthogonal pairs of static pressures located on the surface of the conical probe. These pressures have also been used to deduce other local-flow quantities, such as Mach number and total pressure. Flow-field surveys were obtained at Mach numbers 0.925, 0.975, and 1.025 for both the 4-percent thick and 6-percent thick wing-body combinations. Data were taken at specified spanwise and chordwise positions for angles of attack of 0° , $\pm 2^\circ$, and $\pm 5^\circ$.

The specific flow-field survey tests which were performed and the final data which were obtained are presented in Volumes I through VI of this report. Volumes I through V contain the data obtained in the 4T Tunnel and Volume VI contains data obtained in the 16T Tunnel. Volume I contains Tunnel-empty and Mach-number survey data at Mach numbers 0.80, 0.85, 0.90, 0.95, 1.0, 1.025, 1.05, 1.10 and 1.15. Volumes II, III, and IV contain data for the 4-percent thick wing-body combination at Mach numbers 0.925, 0.975, and 1.025, respectively, and Volume V contains data at the same Mach numbers for the 6-percent thick wing-body combination. Volume VI contains data for the 4-percent thick wing-body combination at the same Mach numbers.

5.2 Pressure Distribution Tests

Axial pressure distributions were obtained along the body surface for Mach numbers 0.80, 0.85, 0.90, 0.925, 0.95, 0.975, 1.0, 1.025, 1.05, 1.10 and 1.15 with the 4-percent thick wing-body combination and for Mach numbers 0.925, 0.975, and 1.025 with the 6-percent thick wing-body combination. The pressure distributions were obtained along the bottom of the body ($\alpha = 0^\circ$, 2° , and 5°) and along the top of the body ($\alpha = -2^\circ$ and -5°).

The specific pressure distribution tests which were performed and the final data which were obtained are presented in this volume, Volume I, for the 4T Tunnel and in Volume VI for the 16T Tunnel.

5.3 Force and Moment Tests

Force and moment data were obtained for the 4-percent thick wing-body combination at Mach numbers 0.80, 0.85, 0.90, 0.925, 0.95, 0.975, 1.0, 1.025, 1.05, 1.10 and 1.15 and for the 6-percent thick wing-body combination at Mach numbers 0.925, 0.975, and 1.025. These data were obtained for $\alpha = 0^\circ$, $\pm 2^\circ$, and $\pm 5^\circ$.

The specific force and moment tests which were performed and the final data which were obtained are presented in this volume, Volume I, for the 4T Tunnel and in Volume VI for the 16T Tunnel.

6. SYMMETRY OF TESTS

This section of the data report contains an assessment of the symmetry of the flow-field survey tests previously described in this report. Specifically, this refers to comparisons of data taken at points whose Z values are identical, but whose Y locations differ in sign only. These comparisons are a good measure of the exactness of positioning the wing-body configuration and probe with respect to one another, the symmetry of the configuration and flow field, and a check of the data reduction procedure.

Figure 8 shows comparisons of pressure (C_p), upwash (AAL), and sidewash (SWL) for positions (4, -1), (-4, -1) and (7, -1), (-7, -1) at $\alpha = 0^\circ$ and $M_\infty = 0.925$ (4-percent thick wing). Figure 9 shows the same comparisons at $M_\infty = 1.025$. These comparisons were carried out for all Mach numbers and angles of attack and for both wings. With the exception of the upwash comparisons at the outboard positions, all comparisons for pressure, upwash and sidewash were very good. Several explanations for the poor upwash comparisons at the outboard positions are offered. First, the regions in which the comparisons are poor are regions in which the measured angle is very small, and the difference in the measurements is usually within the accuracy of the data ($\pm 0.40^\circ$, see DATA UNCERTAINTIES section). Second, the wings on either side of the fuselage have slightly different maximum thickness at the tips. Also, the difference between the vertical coordinates of the wing trailing edge at the tip and root is not the same on both sides. These differences, which are given in figure 10, could effect upwash measurements, although it is felt that it would be a very small effect. It is also possible that the flow field of the tunnel is not symmetric in the region of interest, as is shown in reference 5. A small difference in tunnel-empty upwash in the region of interest could easily cause the differences seen in upwash at the outboard wing position.

The overall good agreement shown in the comparisons indicates accurate positioning of the wing-body configuration in the tunnel and of the probe with respect to the wing-body model, and lends confidence to both the test procedures and data reduction schemes used to obtain this data.

7. DATA UNCERTAINTIES

Uncertainties in the aerodynamic coefficients, local conditions, flow angles, and probe position for the 4T Wind Tunnel were provided by ARO and are presented below.

Force and Moment Data

Uncertainty (+), Absolute

$\underline{C_N}$	$\underline{C_Y}$	$\underline{C_A}$	$\underline{C_m}$	$\underline{C_n}$	$\underline{C_l}$
0.004	0.002	0.004	0.004	0.001	0.003

Probe Position

Uncertainty (+), Absolute

$\underline{X, in.}$	$\underline{Y, in.}$	$\underline{Z, in.}$	$\underline{\alpha_{probe}, deg.}$
0.05	0.05	0.05	0.15

Flow Angles

Uncertainty (+), Absolute

$\underline{AAL, deg}$	$\underline{SWL, deg}$
0.25	0.25

Local Conditions

Uncertainty (+), Absolute

$\underline{C_P}$
0.03

Examining the uncertainties associated with probe angle (α_{probe}) and upwash angle (AAL), there exists a maximum possible uncertainty of $\pm 0.40^\circ$. This is the uncertainty mentioned in Section 6 that could account for the disagreement of upwash angle at the outboard position.

8. TUNNEL-EMPTY SURVEYS

Figure 11 shows the grids used in the tunnel-empty surveys, which were taken at Mach numbers 0.80, 0.85, 0.90, 0.95, 1.0, 1.025, 1.05 and 1.10 and at a nominal free-stream Reynolds number per foot of 3.0×10^6 to ascertain the quality of the tunnel-empty flow field.

An example of the type of results derived from the tunnel-empty surveys is the XT traverse at $YT = 0.0$, $ZT = -14.14$. The sidewash at this particular location should always be zero, since it lies in the plane of symmetry of the configuration. Examining the sidewash at $M_\infty = 0.90$ and 0.95, as shown in figure 12, it is seen to be nonzero. It could be argued at first that the "nonzero" sidewash is due to probe error, but closer inspection shows a consistent nonzero sidewash throughout the Mach number range. With the model in the tunnel, the same nonzero sidewash distribution is present throughout the Mach number and angle of attack range, as shown in figure 12. The consistency of these results offers reasonable proof that the tunnel-empty flow field has a slightly positive sidewash angle along $(YT, ZT) = (0.0, -14.14)$. The nonzero sidewash is relatively small, however, and will therefore have very little effect on the data taken in this region. In this same manner, the tunnel-empty upwash and sidewash in other parts of the flow field can be examined to determine their effects on the data taken in those regions.

The tunnel-empty surveys at $M_\infty = 0.80, 0.85, 0.90, 0.95, 1.0, 1.025, 1.05$ and 1.10 are summarized in Table II. Columns one and two indicate the page number and part number, respectively, of the tabulated data for each tunnel-empty survey. Column four indicates the free-stream Mach number. Columns five, six and seven indicate the XT, YT, and ZT ranges, respectively, for each traverse. Column nine indicates the increment for the axis along which the traverse is being carried out. All positions are relative to the tunnel origin, which is located at the tip of the wing-body model

when the model is at $\alpha = 0^\circ$.

The data are presented in tabular form on pages 1 through 36 at the end of this volume. The heading on each page contains the test number, the part number, the Reynolds number per foot, the angle of attack of the model (not applicable for these tests), the type of wing attached to the model (none for these tests), and the (YT,ZT), (XT,YT), or (XT,ZT) coordinates at which the probe traverse is carried out. Also included are the run and survey numbers and the date on which the data were recorded.

Below the heading information are the data obtained during each test. The first two columns indicate the sequential indexing number for referencing data obtained during one part (POINT) and the location of the probe in the tunnel axis XT, YT, or ZT direction. The wind tunnel free-stream quantities are in columns three through seven, and are Mach number (M), velocity (VM, ft/sec), total pressure (PT, psfa), dynamic pressure (Q, psf), and total temperature (TT, $^\circ\text{F}$). Following these quantities are local quantities as measured by the probe or calculated from probe measurements. These local quantities are Mach number (ML), the ratio of local to free-stream velocity (VML/VM), the ratio of local to free-stream total pressure (PTL/PT), pressure coefficient (CPL), the ratio of local velocity components in the tunnel axis X, Y, and Z directions, respectively, to the free-stream velocity (UT/VM, VT/VM and WT/VM, respectively), and the upwash and sidewash angles referenced to tunnel-axis coordinates (AATL and SWTL, respectively). The positive sense of the upwash and sidewash is shown in figure 7.

9. MACH-NUMBER SURVEYS

The Mach-number surveys were taken at Mach numbers 0.80, 0.85, 0.90, 0.95, 1.0, 1.025, 1.05, 1.10 and 1.15 at a nominal Reynolds number per foot of 3.0×10^6 . These tests were taken with the 4-percent thick wing-body configuration at $\alpha = 0^\circ$ along an X traverse at Y = 3.0, Z = -2.0 and -1.0. The purpose of these

tests was to establish appropriate subcritical and supercritical test conditions for the flow-field surveys.

The data are presented in tabular form on pages 37 through 56 of this volume. The heading on each page contains the test number, the part number, the Reynolds number per foot, the angle of attack of the model, the type of wing attached to the model (4-percent thick wing for the Mach-number surveys), and the Y and Z coordinates at which the X traverse is carried out. Also included are the run and survey numbers and the date on which data were recorded.

Below the heading information are the data obtained during each test. The first two columns indicate the sequential indexing number for referencing data obtained during one part (POINT) and the location of the probe in the body-axis X direction. The wind tunnel free-stream quantities are in columns three through seven and are Mach number (M), velocity (VM, ft/sec), total pressure (PT, psfa), dynamic pressure (Q, psf), and total temperature (TT, °F). Columns eight through sixteen contain local quantities which were either measured by the probe or calculated from probe measurements. These local quantities are Mach number (ML), the ratio of local to free-stream velocity (VML/VM), the ratio of local to free-stream total pressure (PTL/PT), the pressure coefficient (CPL), the ratio of the local velocity components in the body-axis X, Y, and Z directions, respectively, to the free-stream velocity (UL/VM, VL/VM, and WL/VM, respectively), and the upwash and sidewash angles referenced to body-axis coordinates (AAL and SWL, respectively). The positive sense of the upwash and sidewash is shown in figure 7.

10. FORCE AND MOMENT AND PRESSURE TESTS

This section presents the force and moment and pressure data at $M_\infty = 0.80, 0.85, 0.90, 0.925, 0.95, 0.975, 1.0, 1.025, 1.05, 1.10$ and 1.15 for the 4-percent thick wing-body and at $M_\infty = 0.925,$

0.975 and 1.025 for the 6-percent thick wing-body. Data for both wings is presented at $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$. These tests, performed at a nominal Reynolds number per foot of 3.0×10^6 , are outlined in Table IV of this volume. The tabulated data are at the end of this volume beginning on the page numbered 57.

10.1 Description of Tests

The aerodynamic coefficients on the wing-body models were obtained during the force and moment tests using the 1.5-inch, 500 lb. AEDC balance #6-1.50-0.50-1.12 M-A. The fuselage was bored out and mounted on this balance. The surface-pressure data were obtained from the 25 pressure orifices on the body surface. The orifices are labeled 1 through 25 with number 1 being closest to the nose tip. The data are arranged such that there are two pages for each Mach number. The first presents the force and moment data for the angle-of-attack range ($0^\circ, \pm 2^\circ, \pm 5^\circ$) and the second presents the pressure data obtained at each angle of attack.

The force and moment and pressure tests are summarized in Table IV. Columns one and two indicate the page and part numbers, respectively, of the tabulated data. Column four indicates the Mach number. Column six indicates the type of data given on each page; F & M indicates force and moment data and P indicates pressure data. Column eight indicates which wing (4-percent thick or 6-percent thick) was attached to the body for each particular run.

10.2 Description of Data

The data are presented in tabular form on pages 57 through 84 of this volume. As previously mentioned, each Mach number has two pages of data associated with it. The first page contains force and moment data and the second contains pressure data. The heading on both pages is identical and contains the test number, the part

number, the free-stream Mach number, total pressure, static pressure, Reynolds number per foot, velocity, dynamic pressure, and total temperature. Also included are the type of wing attached to the body (4-percent thick or 6-percent thick), the run number and the survey number.

Below the heading on the first page of each Mach number section are the data obtained during each force and moment test. The results for the force and moment tests include the wing-body model angle of attack, the normal-force coefficient (CNF), the side-force coefficient (CY), the axial-force coefficient corrected for base effects (CAF), the pitching-moment coefficient (CLMF), the yawing-moment coefficient (CLN), the rolling-moment coefficient (CLL), and the base axial-force coefficient (CAB). The positive sense of these forces and moments is shown in figure 13.

Below the heading on the second page of each Mach number section are the data obtained during each pressure test. Column one indicates the orifice at which the pressure coefficient was measured. Columns two through six indicate the pressure coefficient at $\alpha = -5^\circ$, -2° , 0° , 2° and 5° , respectively, at each orifice location. The locations of the pressure orifices are shown in figure 2.

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1. Kistner, L. E. and Kump, W. I. Procedures and Computer Program for Conducting Force Tests in the PWT at Facility. Revised Sept. 5, 1973.
2. Ralston, D. E. : Static Wind-Body Flowfield Study Test. PWT Test Facility, Project Criteria, Project No. PWT-100, Test No. TF-100, Mar. 10, 1973.

**TABLE I. - SUMMARY OF TABULATED
DATA IN VOLUME I**

$$Re/ft = 3.0 \times 10^6$$

Table (1)	Test (2)	Pages (3)
II	Tunnel-empty surveys	1-36
III	Mach-number surveys	37-56
IV	Force and moment and pressure data	57-84

TABLE II.- TUNNEL-EMPTY SURVEYS

1	2	3	4	5	6	7	8	9	10
Page No.	Part No.		Mach No.	XT Range inches	YT Range inches	ZT Range inches		Δ inches	
1	34		0.80	-6.000 to 24.000	0.000	-14.142		2.000	
2	34			-6.000 to 24.000	0.000	0.000		2.000	
3	34			-6.000 to 24.000	14.142	0.000		2.000	
4	33			14.000 to -14.000	14.000	0.000		2.000	
5	33			14.000 to -14.000	0.000	14.000		2.000	
6	37		0.85	-6.000 to 24.000	0.000	-14.142		2.000	
7	37			-6.000 to 24.000	0.000	0.000		2.000	
8	37			-6.000 to 24.000	14.142	0.000		2.000	
9	36			14.000 to -14.000	14.000	0.000		2.000	
10	36			14.000 to -14.000	0.000	14.000		2.000	

TABLE II. - CONTINUED

1	2	3	4	5	6	7	8	9	10
Page No.	Part No.		Mach No.	XT Range inches	YT Range inches	ZT Range inches		Δ inches	
11	39		0.90	-6.000 to 24.000	0.000	-14.142		2.000	
12	39			-6.000 to 24.000	0.000	0.000		2.000	
13	39			-6.000 to 24.000	14.142	0.000		2.000	
14	38			14.000	14.000 to -14.000	0.000		2.000	
15	38			14.000	0.000	14.000 to -14.000		2.000	
16	41		0.95	-6.000 to 24.000	0.000	-14.142		2.000	
17	41			-6.000 to 24.000	0.000	0.000		2.000	
18	41			-6.000 to 24.000	14.142	0.000		2.000	
19	40			14.000	14.000 to -14.000	0.000		2.000	
20	40			14.000	0.000	14.000 to -14.000		2.000	

TABLE II.- CONTINUED

	1	2	3	4	5	6	7	8	9	10
	Page No.	Part No.		Mach No.	XT Range inches	YT Range inches	ZT Range inches		Δ inches	
	21	43		1.00	-6.000 to 24.000	0.000	-14.142		2.000	
	22	43			-6.000 to 24.000	14.142	0.000		2.000	
	23	43			-6.000 to 24.000	14.142	0.000		2.000	
	24	42			14.000	14.000 to -14.000	0.000		2.000	
	25	42			14.000	0.000	14.000 to -14.000		2.000	
	26	45		1.025	-6.000 to 24.000	0.000	-14.142		2.000	
	27	45			-6.000 to 24.000	0.000	0.000		2.000	
	28	45			-6.000 to 24.000	14.142	0.000		2.000	
	29	44			14.000	14.000 to -14.000	0.000		2.000	
	30	44			14.000	0.000	14.000 to -14.000		2.000	

TABLE II.- CONCLUDED

1	2	3	4	5	6	7	8	9	10
Page No.	Part No.		Mach No.	XT Range inches	YT Range inches	ZT Range inches		Δ inches	
31	47		1.05	-6.000 to 24.000	0.000	-14.142		2.000	
32	47			-6.000 to 24.000	0.000	0.000		2.000	
33	47			-6.000 to 24.000	14.142	0.000		2.000	
34	46			14.000 to -14.000	14.000	0.000		2.000	
35	46			14.000	0.000	14.000 to -14.000		2.000	
36	48		1.10	14.000 to -14.000	0.000	14.000		2.000	

TABLE III.- MACH-NUMBER SURVEYS

	1	2	3	4	5	6	7	8	9	10
	Page No.	Part No.		Mach No.	Initial X inches	Final X inches	ΔX inches		Y inches	Z inches
	37	85		0.80	10.333	19.000	0.333		3.000	-2.000
	38	86		↓						-1.000
	39	93		0.85						-2.000
	40	94		↓						-1.000
	41	96		0.90						-2.000
	42	97		↓						-1.000
	43	99		0.95						-2.000
	44	100		↓						-1.000
	45	102		1.00						-2.000
	46	103		↓						-1.000
	47	105		1.025						-2.000
	48	106		↓						-1.000
	49	108		1.050						-2.000
	50	109		↓						-1.000
	51	111		1.10						-2.000
	52	112		↓						-1.000
	53	114		1.15						-2.000
	54	115		↓						-1.000
								α		
	55	928		0.85	11.000	19.000	0.666	5.0	4.000	-1.000
	56	929		↓	↓	↓	↓	-5.0	↓	↓

TABLE IV.- FORCE AND MOMENT AND PRESSURE TESTS

1	2	3	4	5	6	7	8	9	10
Page No.	Part No.		Mach No.		Type of Data		Wing		
57	73		0.80		F & M		4%		
58	↓		↓		P		↓		
59	74		0.85		F & M				
60	↓		↓		P				
61	75		0.90		F & M				
62	↓		↓		P				
63	938		0.925		F & M				
64	↓		↓		P				
65	76		0.95		F & M				
66	↓		↓		P				
67	939		0.975		F & M				
68	↓		↓		P				
69	77		1.00		F & M				
70	↓		↓		P				
71	78		1.025		F & M				
72	↓		↓		P				
73	79		1.05		F & M				
74	↓		↓		P				
75	80		1.10		F & M				
76	↓		↓		P				
77	81		1.15		F & M		↓		
78	↓		↓		P				
79	945		0.925		F & M		6%		
80	↓		↓		P		↓		
81	946		0.975		F & M				
82	↓		↓		P				
83	947		1.025		F & M		↓		
84	↓		↓		P				



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Figure 1.- Conical flow-field survey probe on CTS and wing-body combination with 4-percent thick airfoil.

BODY COORDINATES	
$x, \text{ in.}$	$r, \text{ in.}$
0	0
0.5	0.162
1.0	0.313
1.5	0.453
2.0	0.583
2.5	0.703
3.0	0.813
3.5	0.912
4.0	1.000
4.5	1.078
5.0	1.146
5.5	1.203
6.0	1.250
6.5	1.287
7.0	1.313
7.5	1.328
8.0	1.333
24.0	1.333

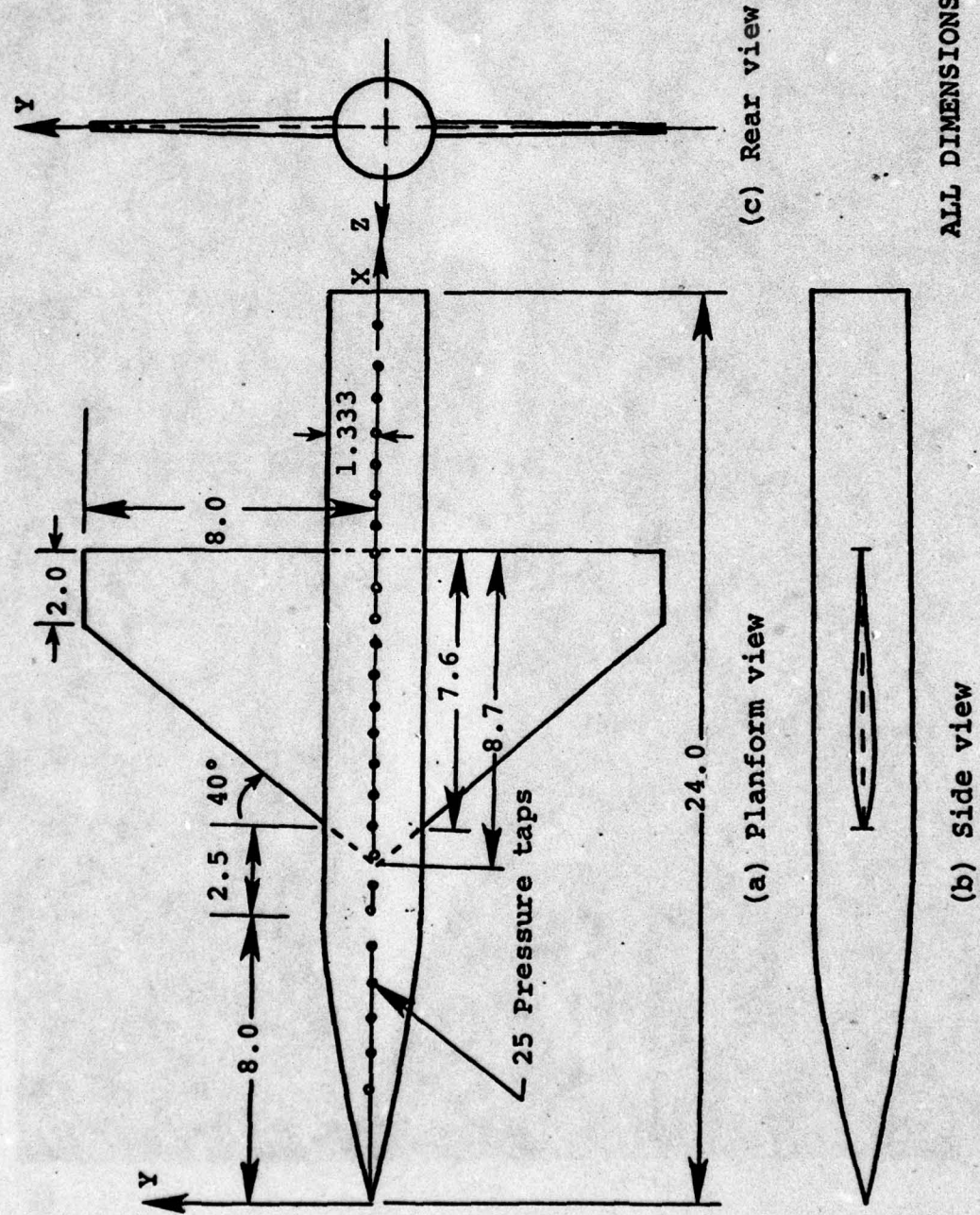
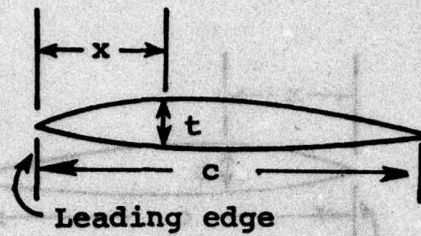


Figure 2.-Wing-body combination.



$x/c, \%$	$t/2c, \%$
0	0
2.5	0.325
5.0	0.548
7.5	0.736
10.0	0.900
15.0	1.175
20.0	1.399
25.0	1.576
30.0	1.726
35.0	1.837
40.0	1.921
45.0	1.974
50.0	1.998
55.0	1.989
60.0	1.955
65.0	1.885
70.0	1.777
75.0	1.620
80.0	1.406
85.0	1.085
90.0	0.738
95.0	0.369
100.0	0

$$t_{\max} = 2(7.6) (0.01998) \\ = 0.304" \quad @ \text{ root}$$

$$t_{\max} = 2(2) (0.01998) \\ = 0.080" \quad @ \text{ tip}$$

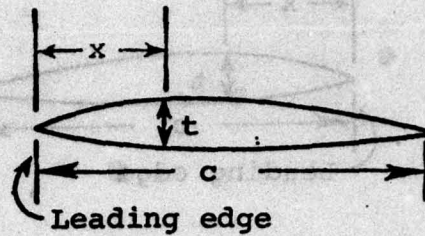
Leading-edge radius: 0.1 percent c

Trailing-edge radius: 0.01 percent c

(a) 4-percent thick airfoil

Figure 3.-Coordinates of airfoil sections.

$x/c, \%$	$t/2c, \%$
0	0
0.5	0.464
0.75	0.563
1.25	0.718
2.5	0.981
5.0	1.313
7.5	1.591
10.0	1.824
15.0	2.194
20.0	2.474
25.0	2.687
30.0	2.842
35.0	2.945
40.0	2.996
45.0	2.992
50.0	2.925
55.0	2.793
60.0	2.602
65.0	2.364
70.0	2.087
75.0	1.775
80.0	1.437
85.0	1.083
90.0	0.727
95.0	0.370
100.0	0.013



$$t_{\max} = 2(7.6)(2.996)$$

$$= 0.455" \quad \text{@ root}$$

$$t_{\max} = 2(2)(2.996)$$

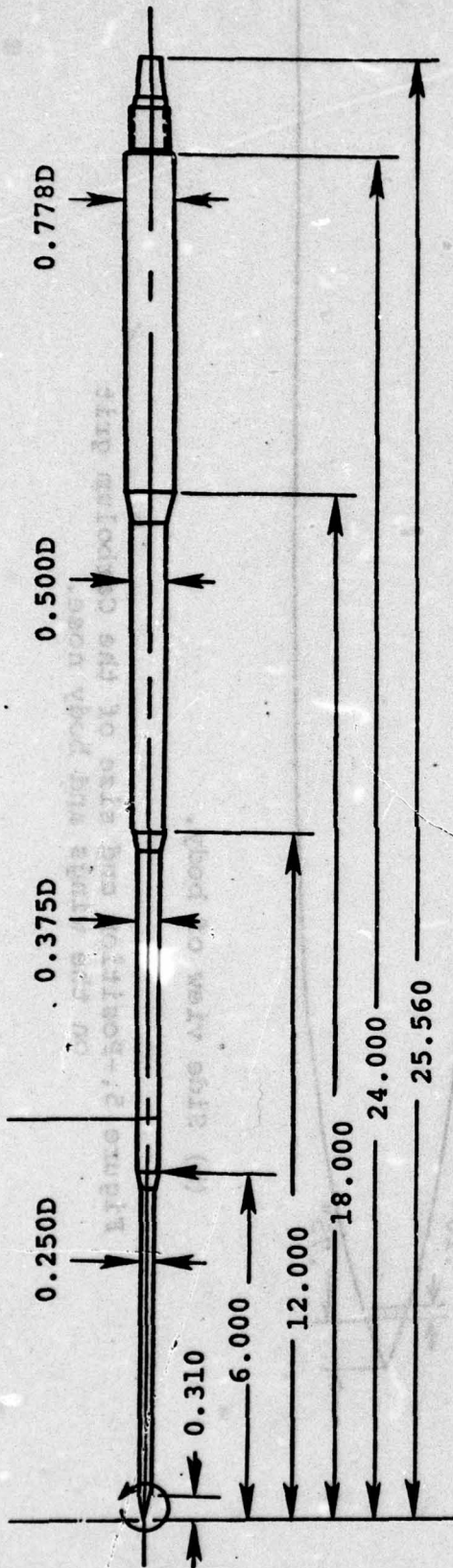
$$= 0.120" \quad \text{@ tip}$$

Leading-edge radius: 0.229 percent c

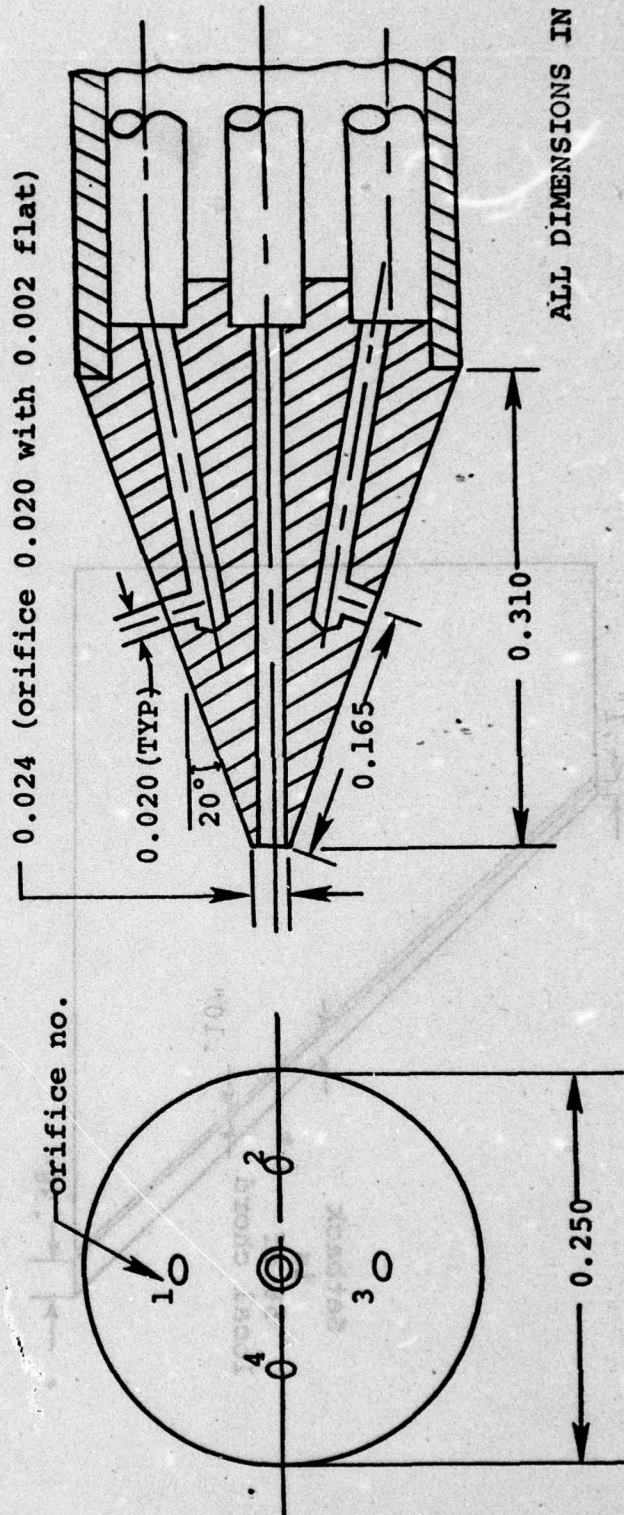
Trailing-edge radius: 0.014 percent c

(b) 6-percent thick airfoil (NACA 65A006)

Figure 3.-Concluded.

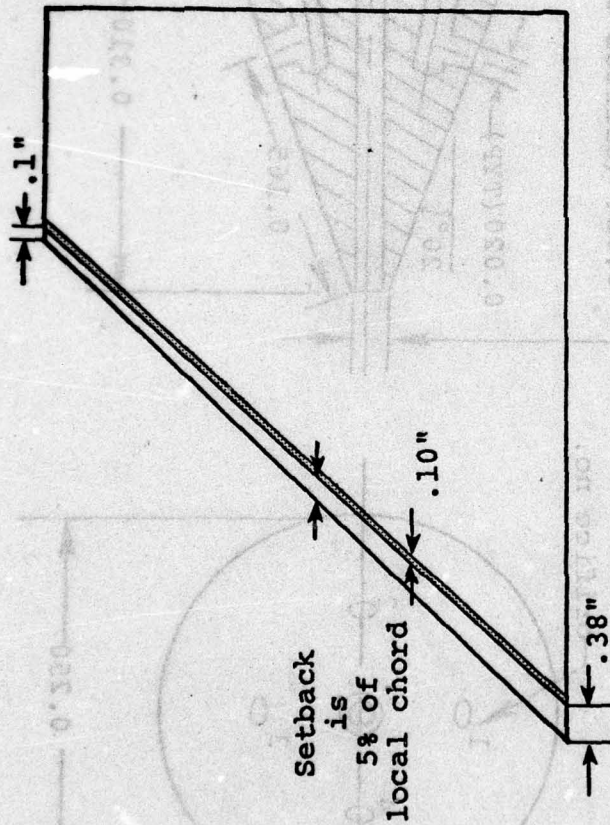


(a) Overall view of the probe.



(b) Details of the 40° probe tip.

Figure 4.-Details and Dimensions of the 40° apex angle probe.

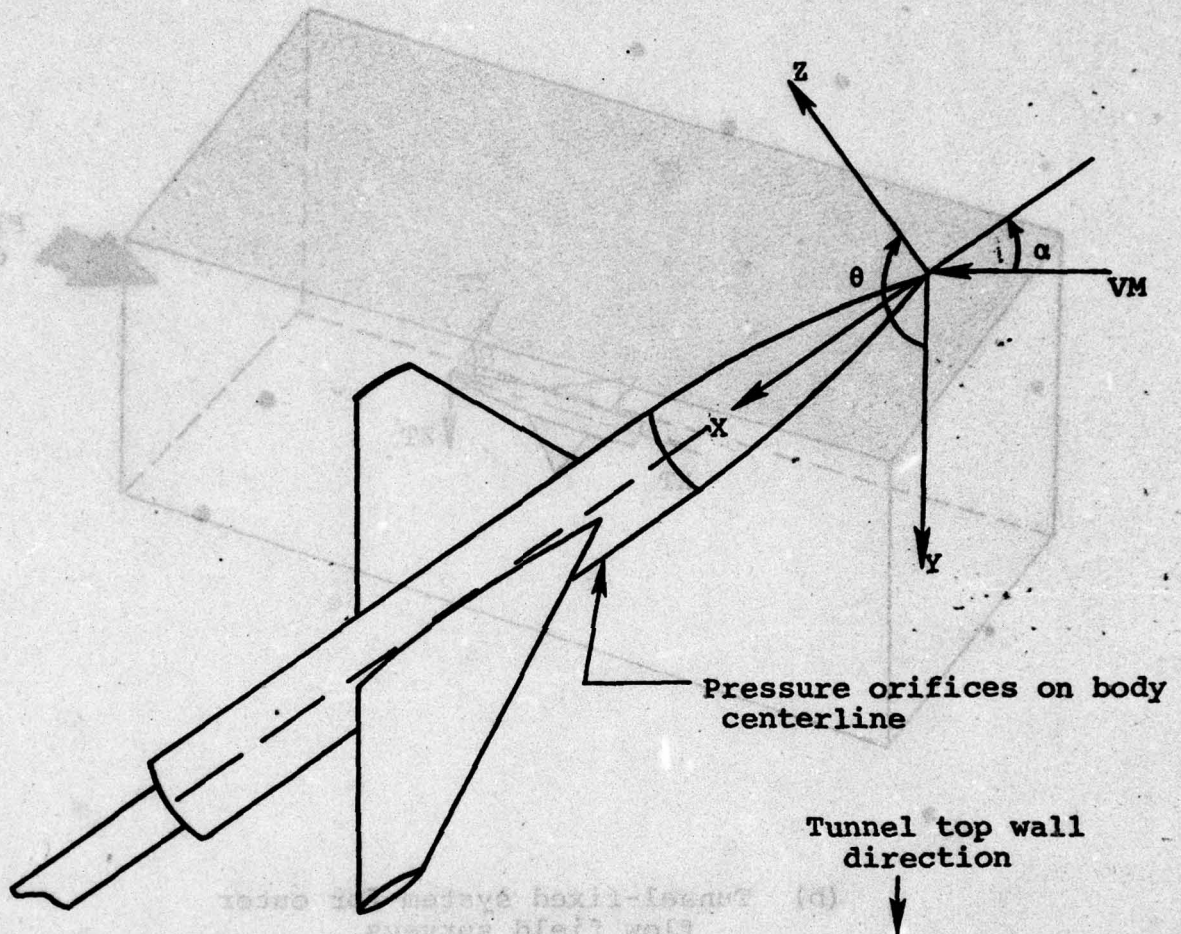


(a) Planform view of wing.



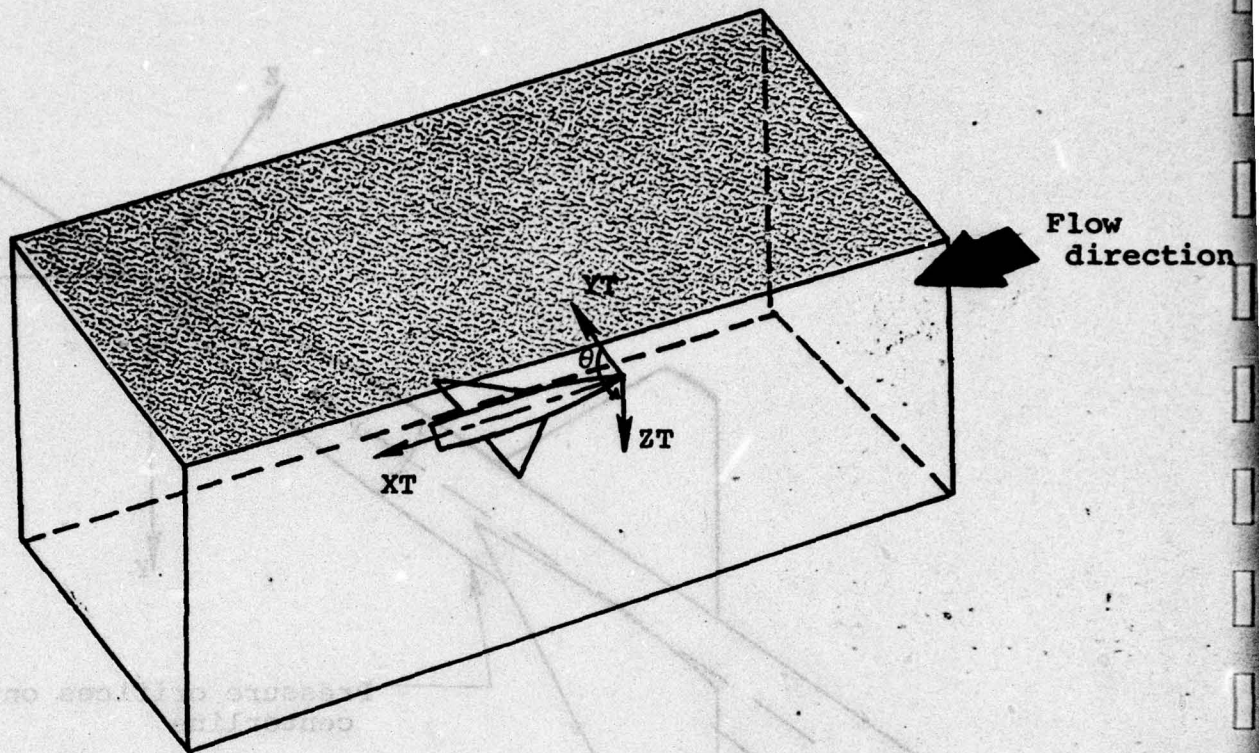
(b) Side view of body.

Figure 5.-Position and size of the Carbolium grit on the wings and body nose.



(a) Body-fixed system for inner flow field surveys.

Figure 6.-Coordinate systems.



(b) Tunnel-fixed system for outer flow field surveys.

Figure 6.- Concluded.

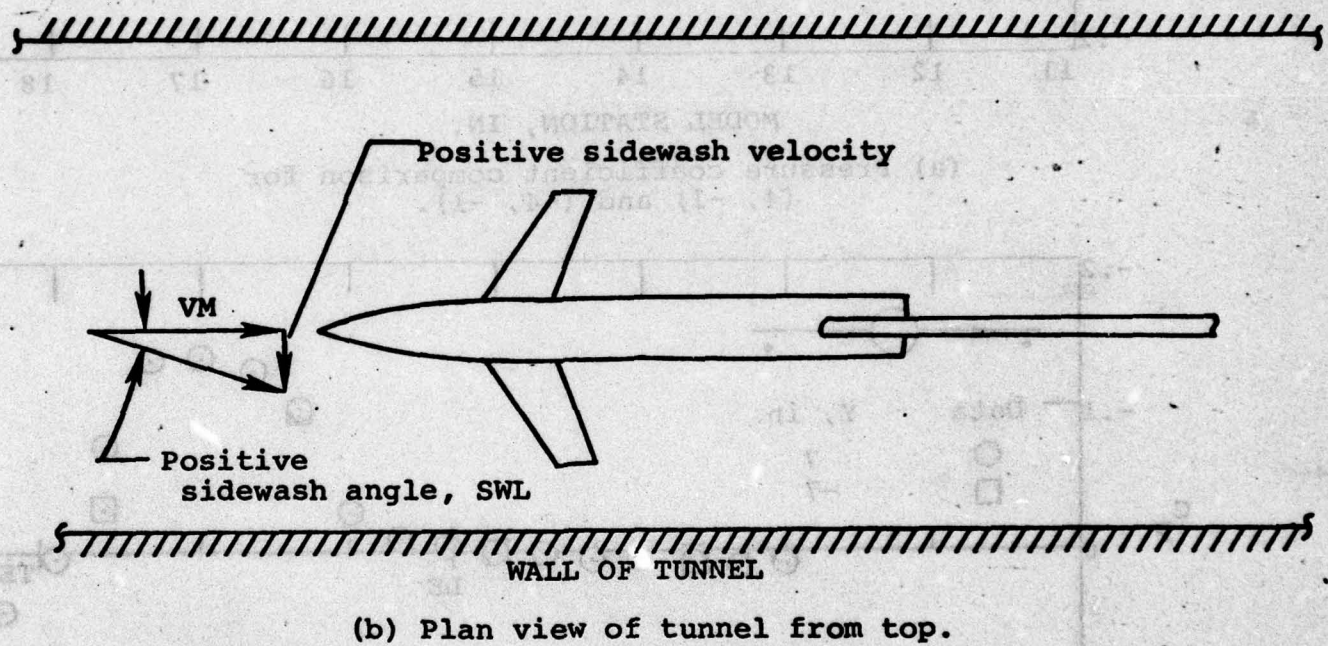
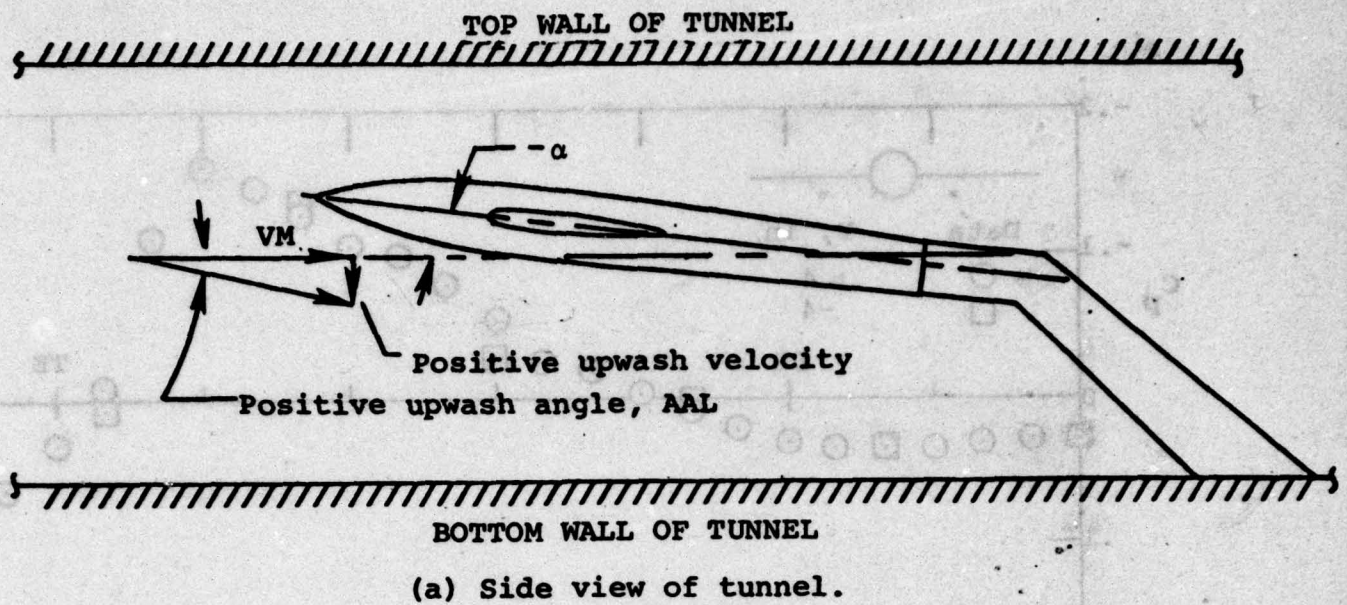
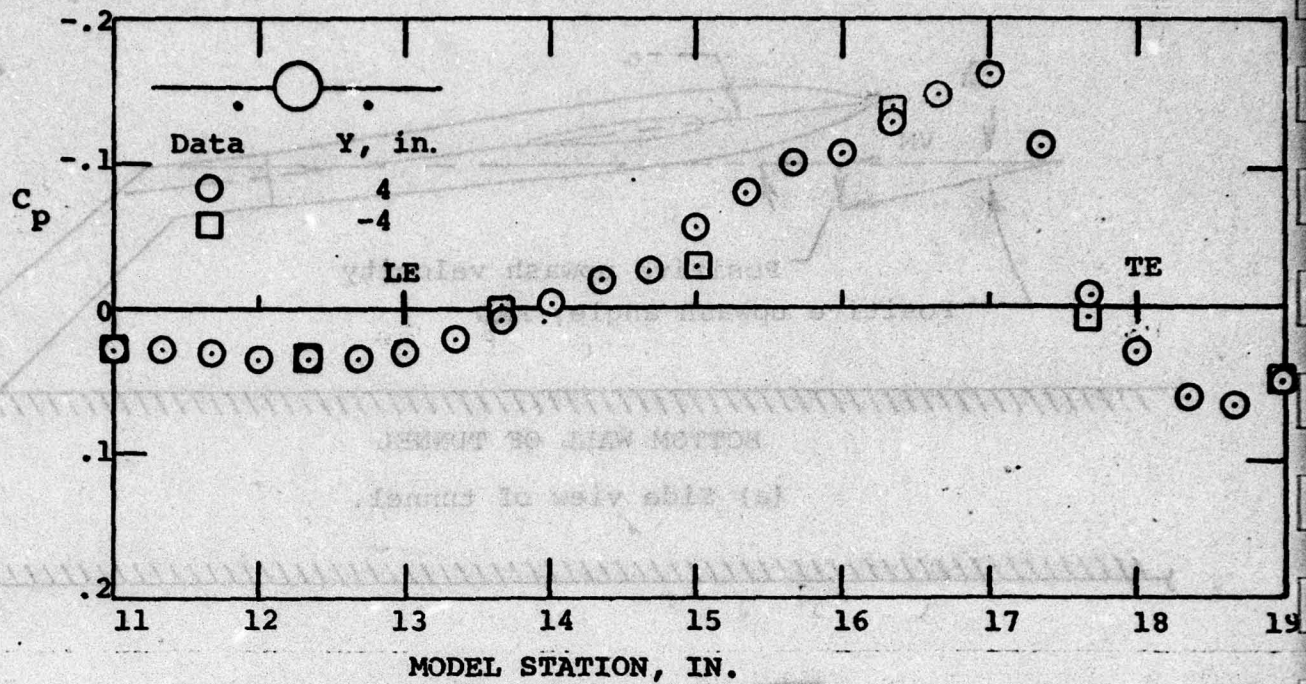
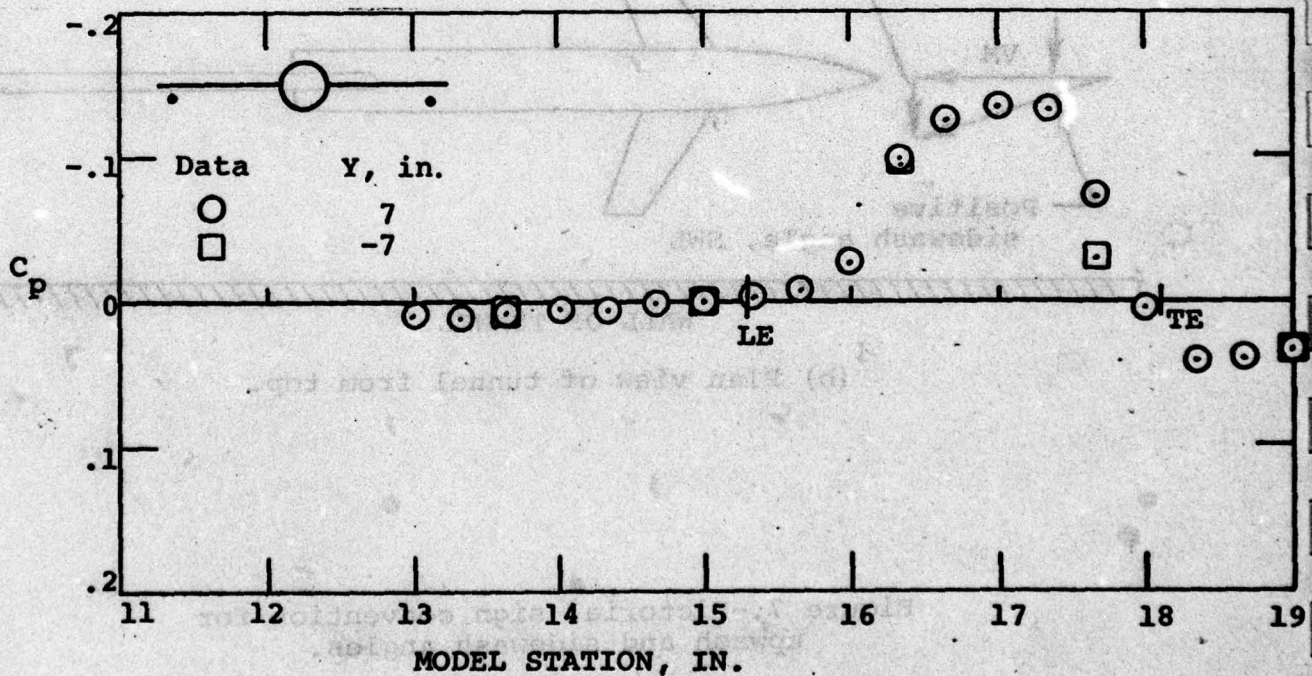


Figure 7.-Pictorial sign convention for upwash and sidewash angles.

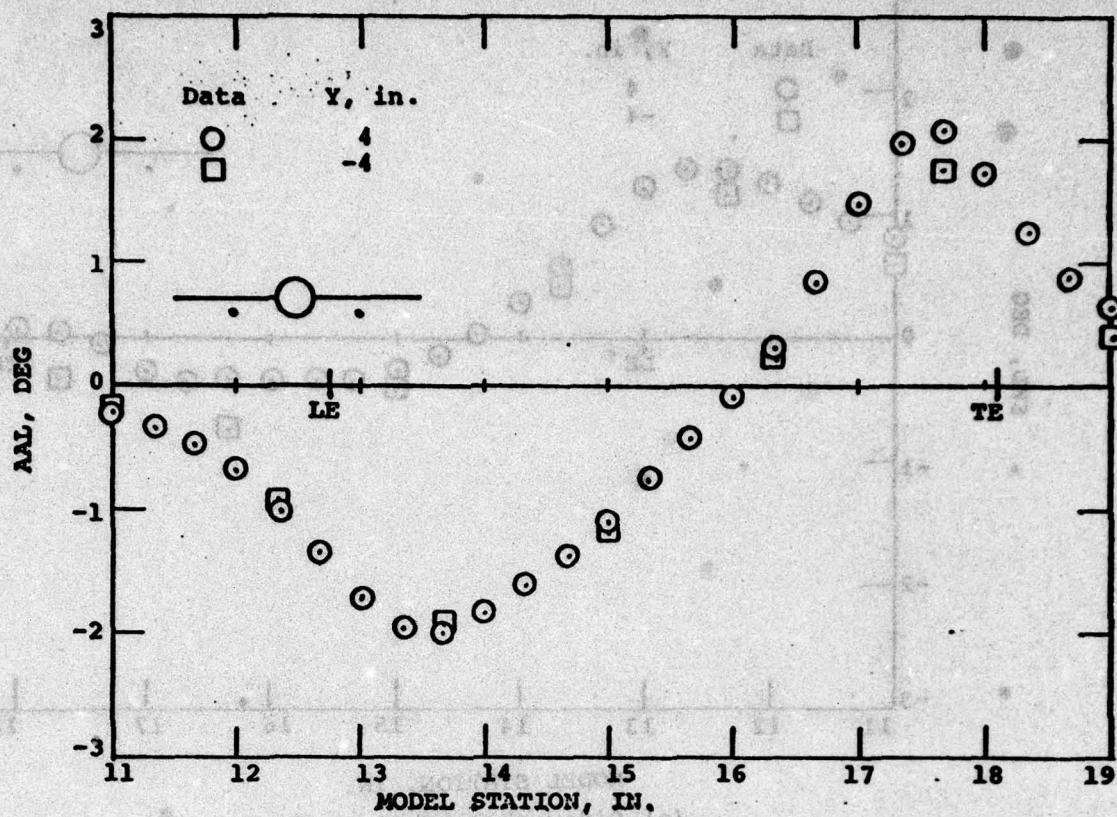


(a) Pressure coefficient comparison for (4, -1) and (-4, -1).

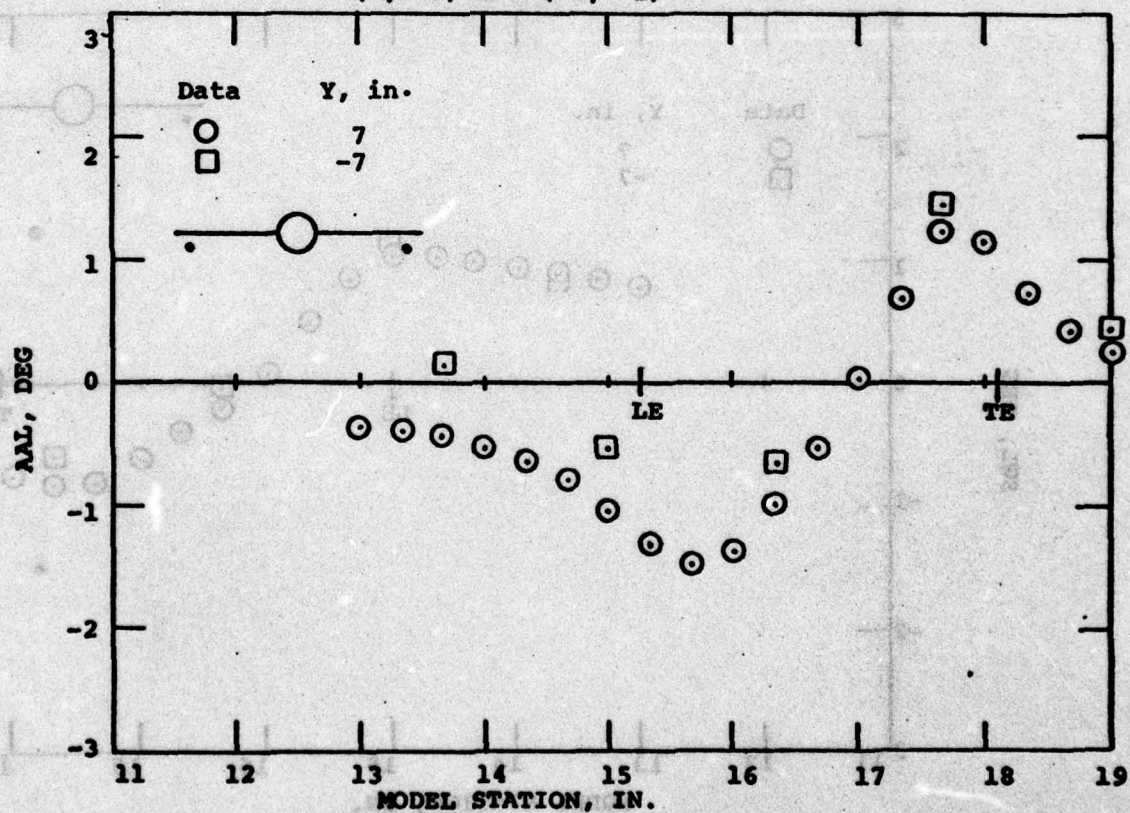


(b) Pressure coefficient comparison for (7, -1) and (-7, -1).

Figure 8.-Symmetry comparisons for 4-percent thick wing-body combination at $Z = -1.0$ in., $\alpha = 0^\circ$, $M_\infty = 0.925$.

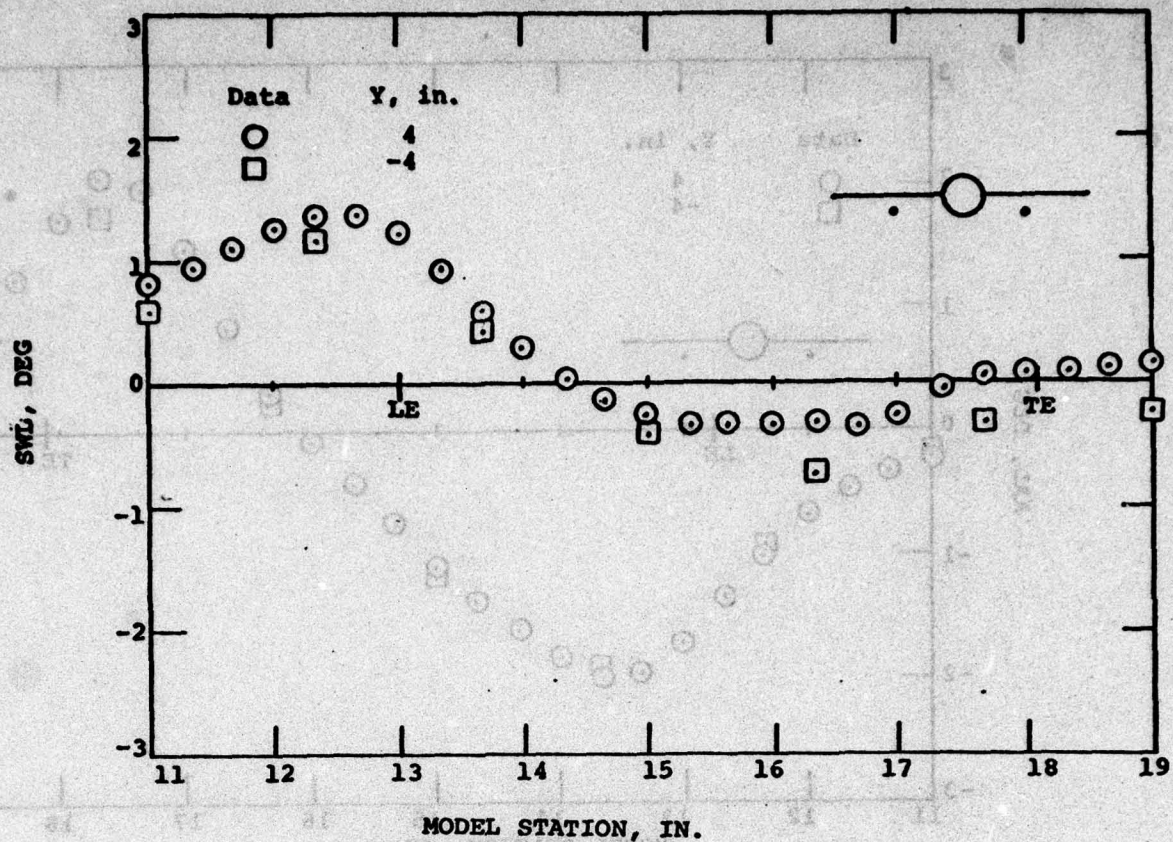


(c) Upwash comparison for
(4, -1) and (-4, -1).

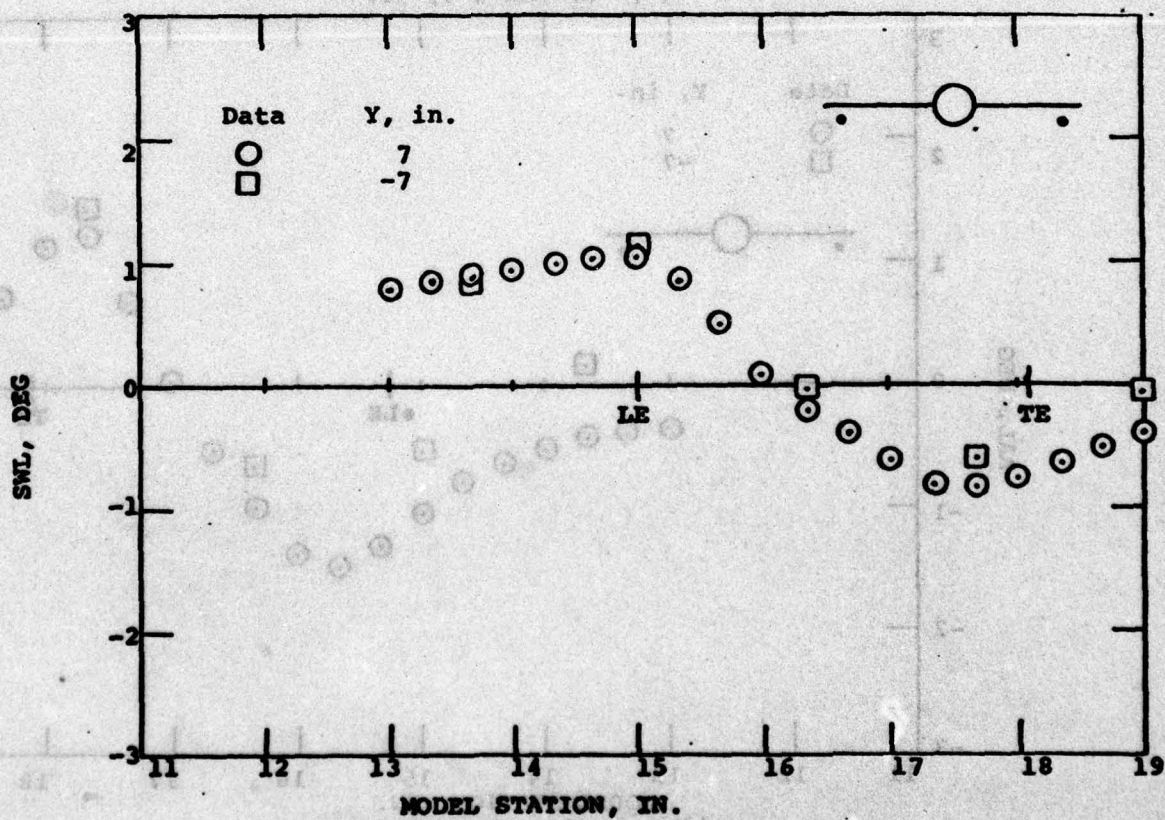


(d) Upwash comparison for
(7, -1) and (-7, -1).

Figure 8.-Continued.

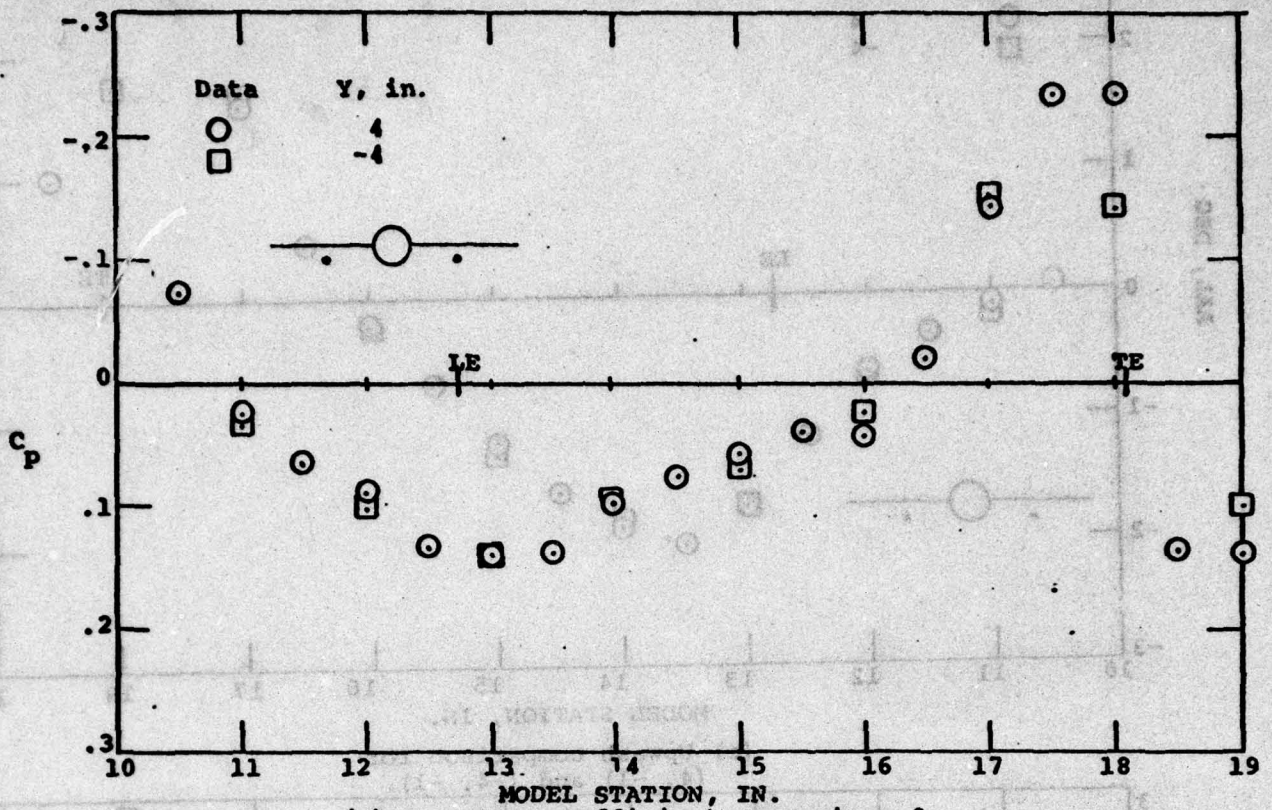


(e) Sidewash comparison for
(4, -1) and (-4, -1).

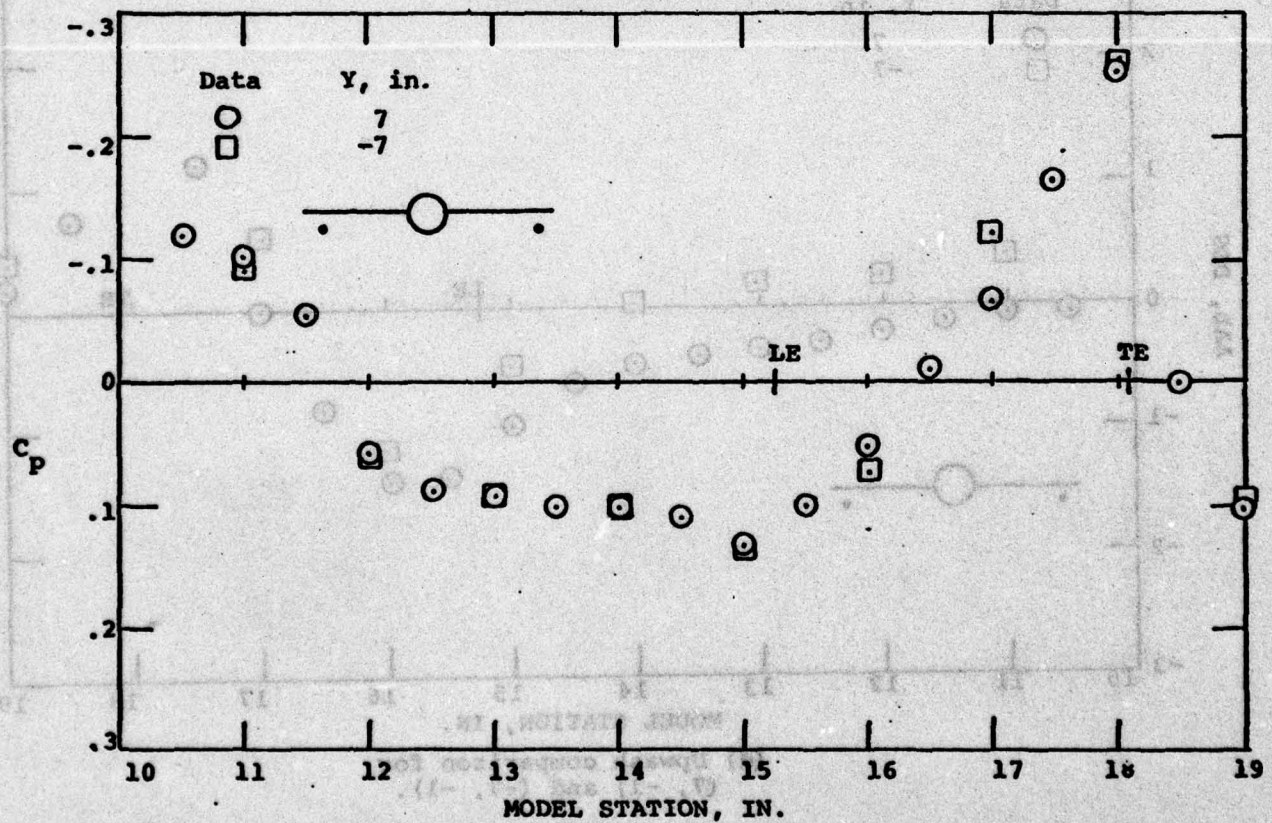


(f) Sidewash comparison for
(7, -1) and (-7, -1).

Figure 8.-Concluded.

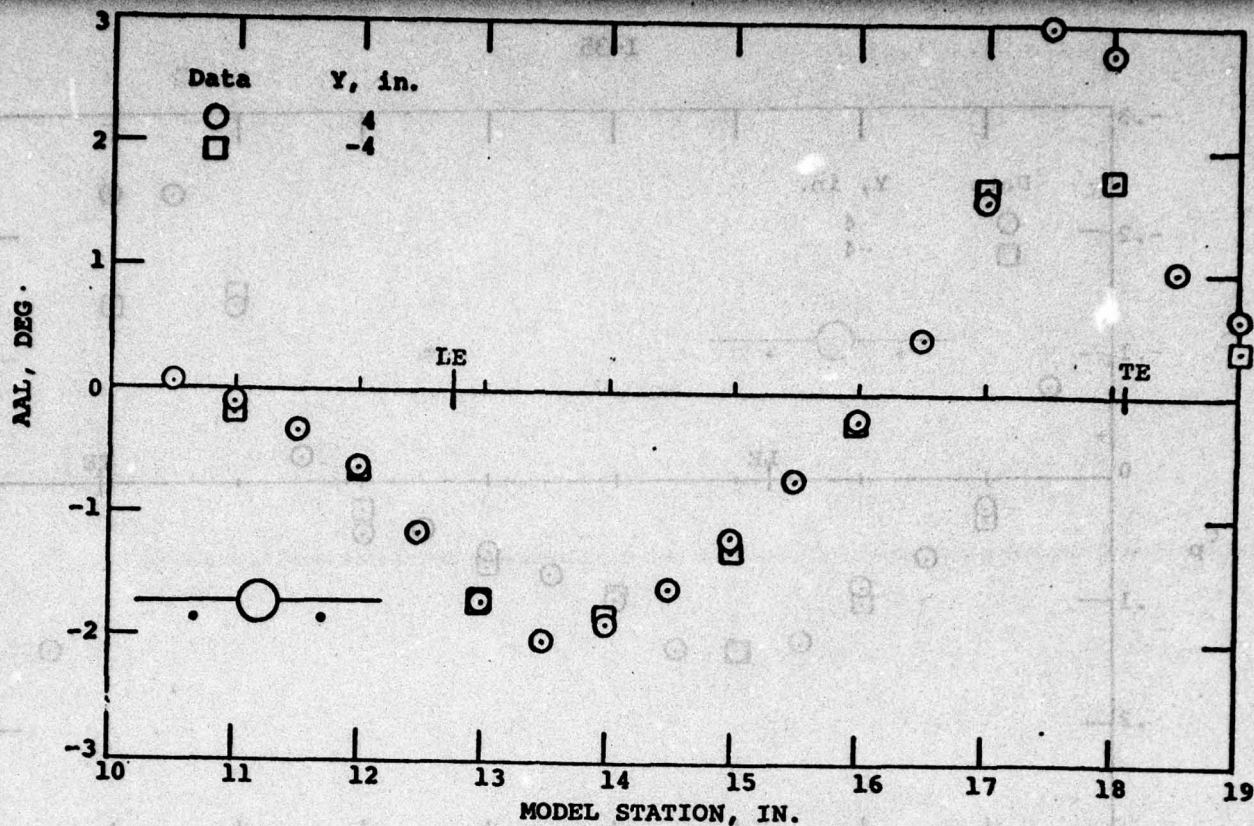


(a) Pressure coefficient comparison for (4, -1) and (-4, -1).

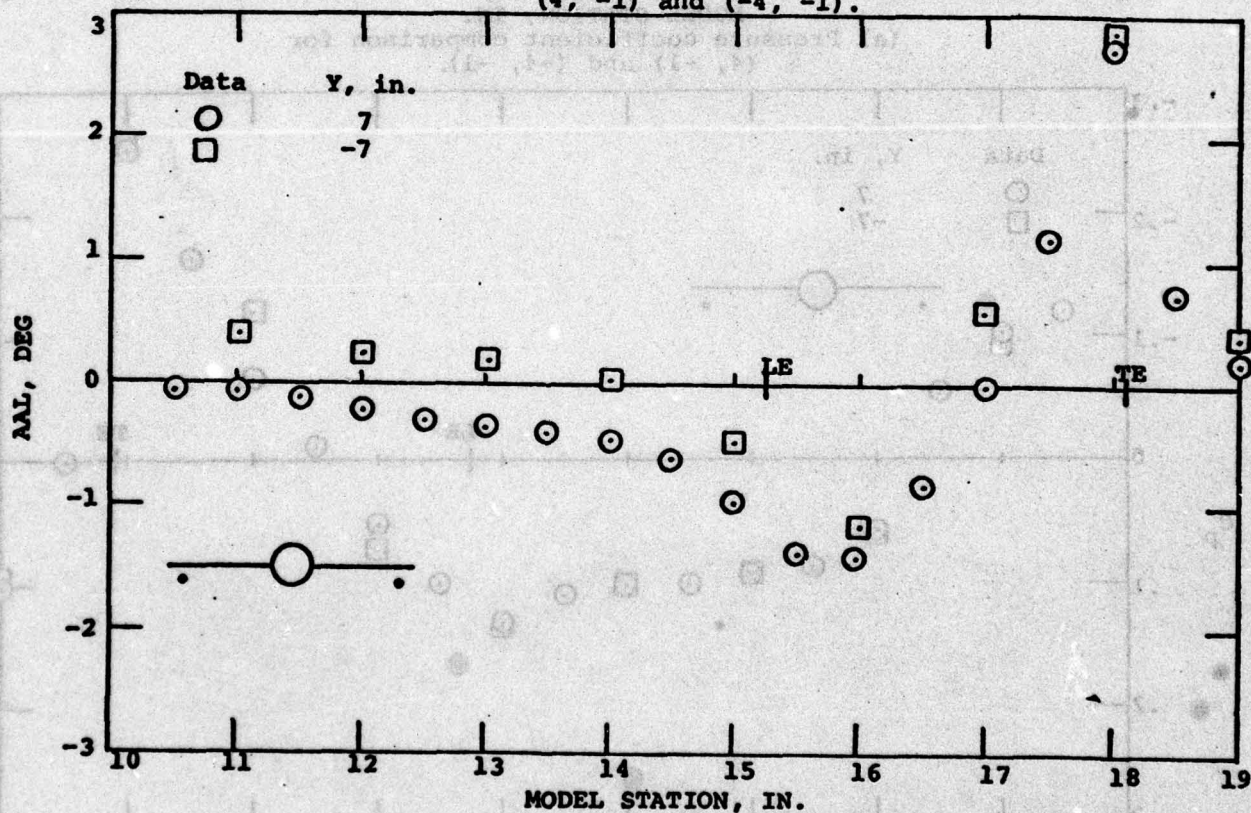


(b) Pressure coefficient comparison for (7, -1) and (-7, -1).

Figure 9.-Symmetry comparisons for 4-percent thick wing-body combination at $Z = -1.0$ in., $\alpha = 0^\circ$, $M_\infty = 1.025$.

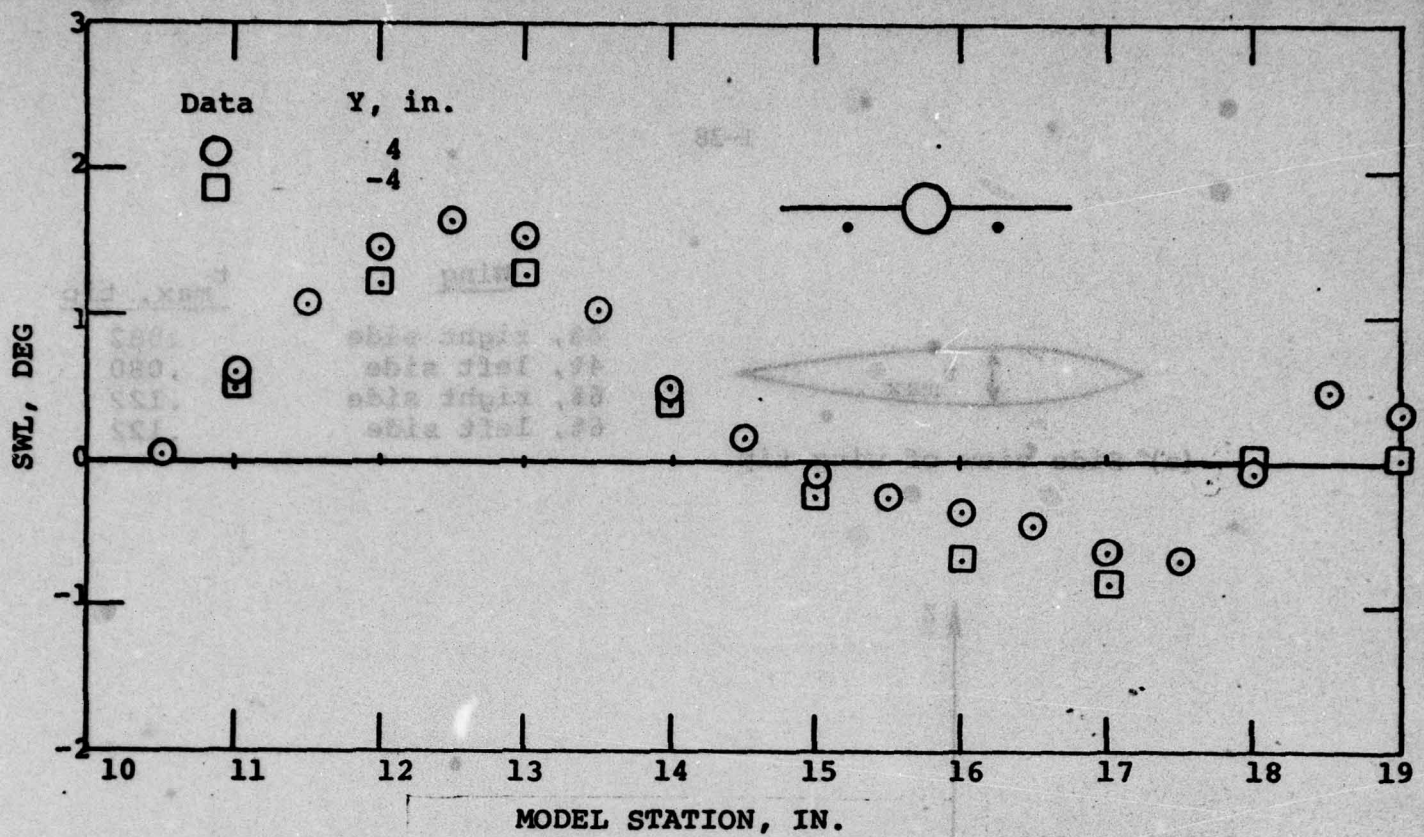


(c) Upwash comparison for
(4, -1) and (-4, -1).

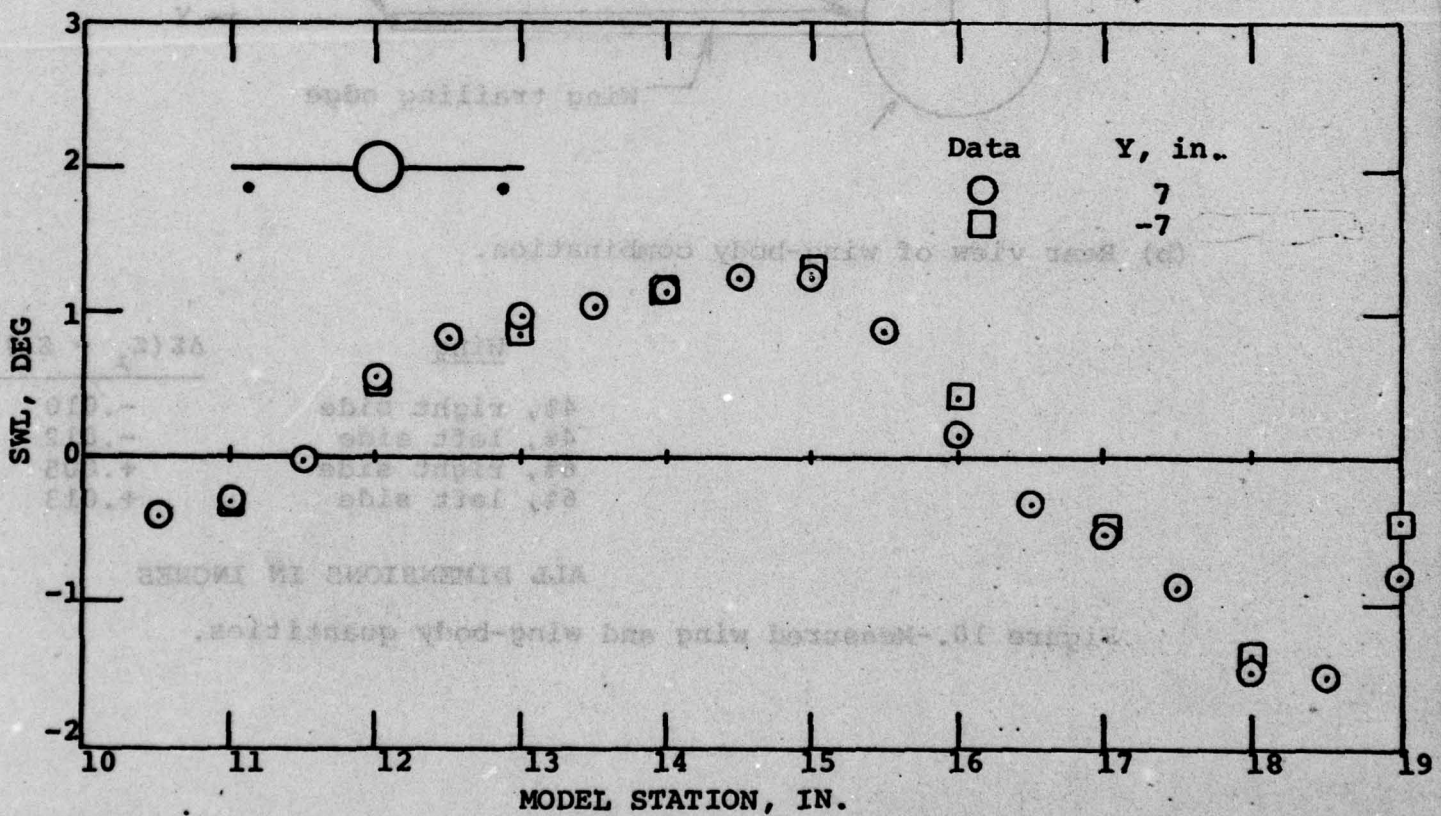


(d) Upwash comparison for
(7, -1) and (-7, -1).

Figure 9.- Continued.

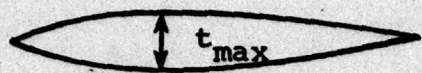


(e) Sidewash comparison for
(4, -1) and (-4, -1).



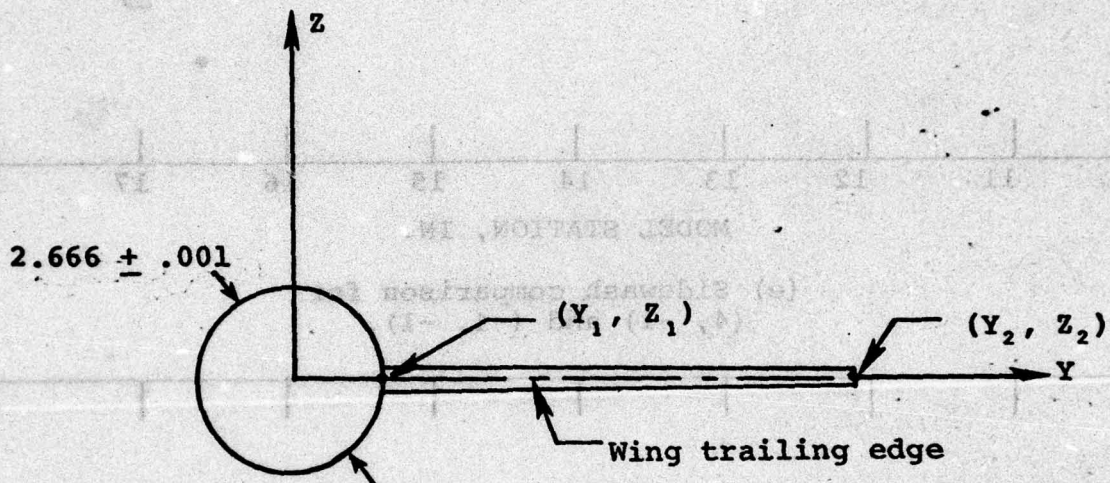
(f) Sidewash comparison for
(7, -1) and (-7, -1).

Figure 9.-Concluded.



(a) Side view of wing tip.

<u>Wing</u>	<u>$t_{max, tip}$</u>
4%, right side	.082
4%, left side	.080
6%, right side	.122
6%, left side	.122

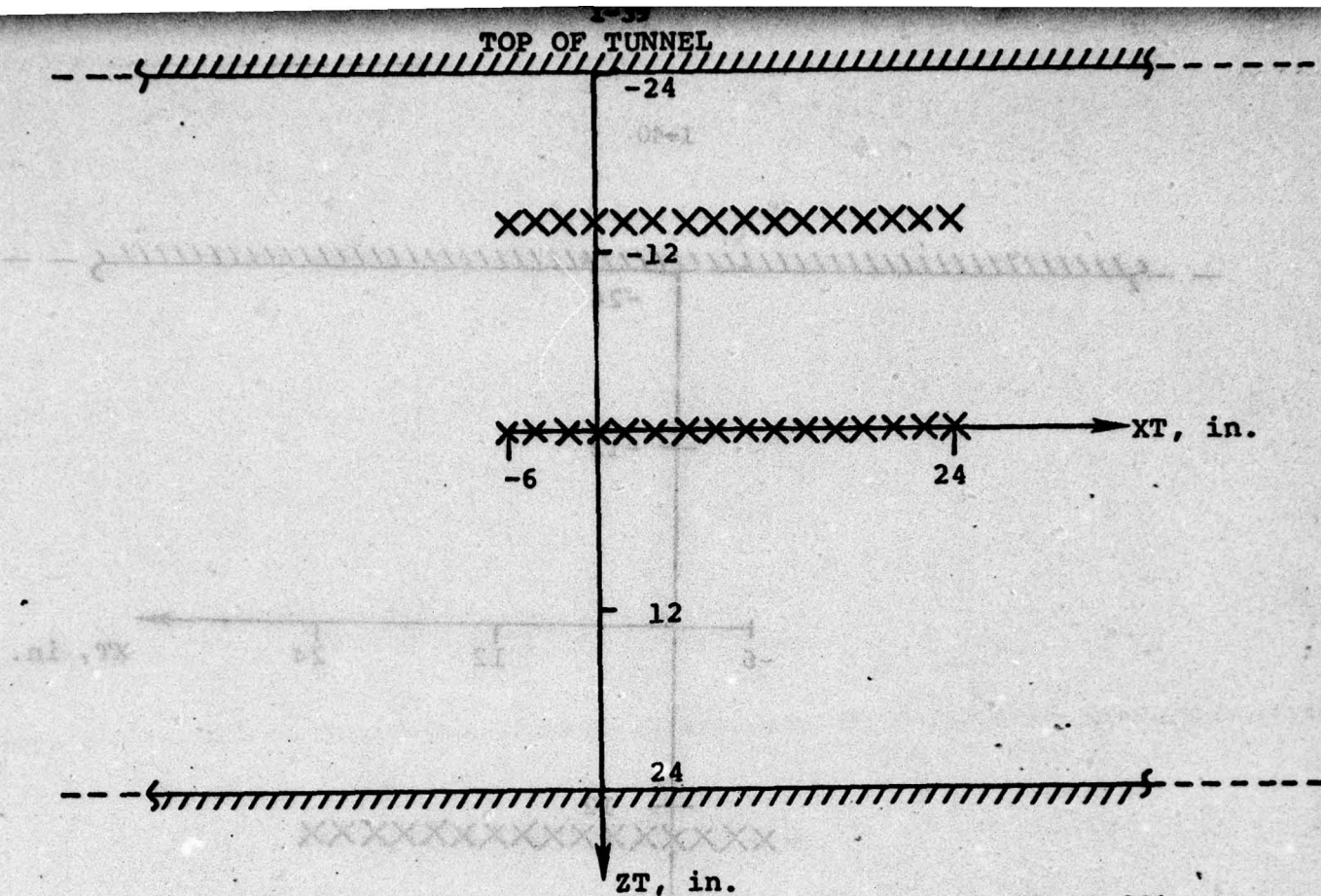


(b) Rear view of wing-body combination.

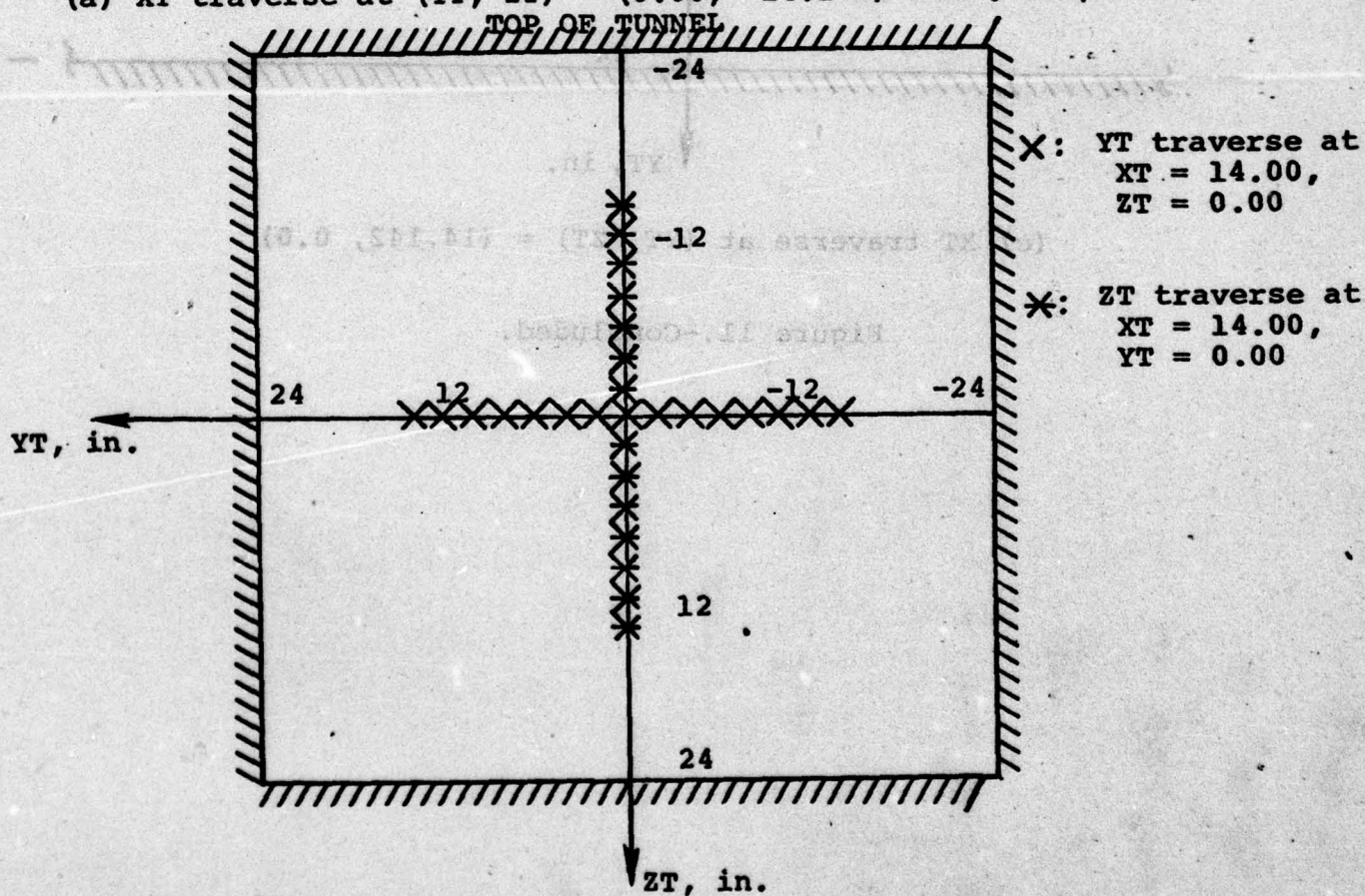
<u>Wing</u>	<u>$\Delta Z(Z_2 - Z_1)$</u>
4%, right side	-.010
4%, left side	-.012
6%, right side	+.005
6%, left side	+.013

ALL DIMENSIONS IN INCHES

Figure 10.-Measured wing and wing-body quantities.



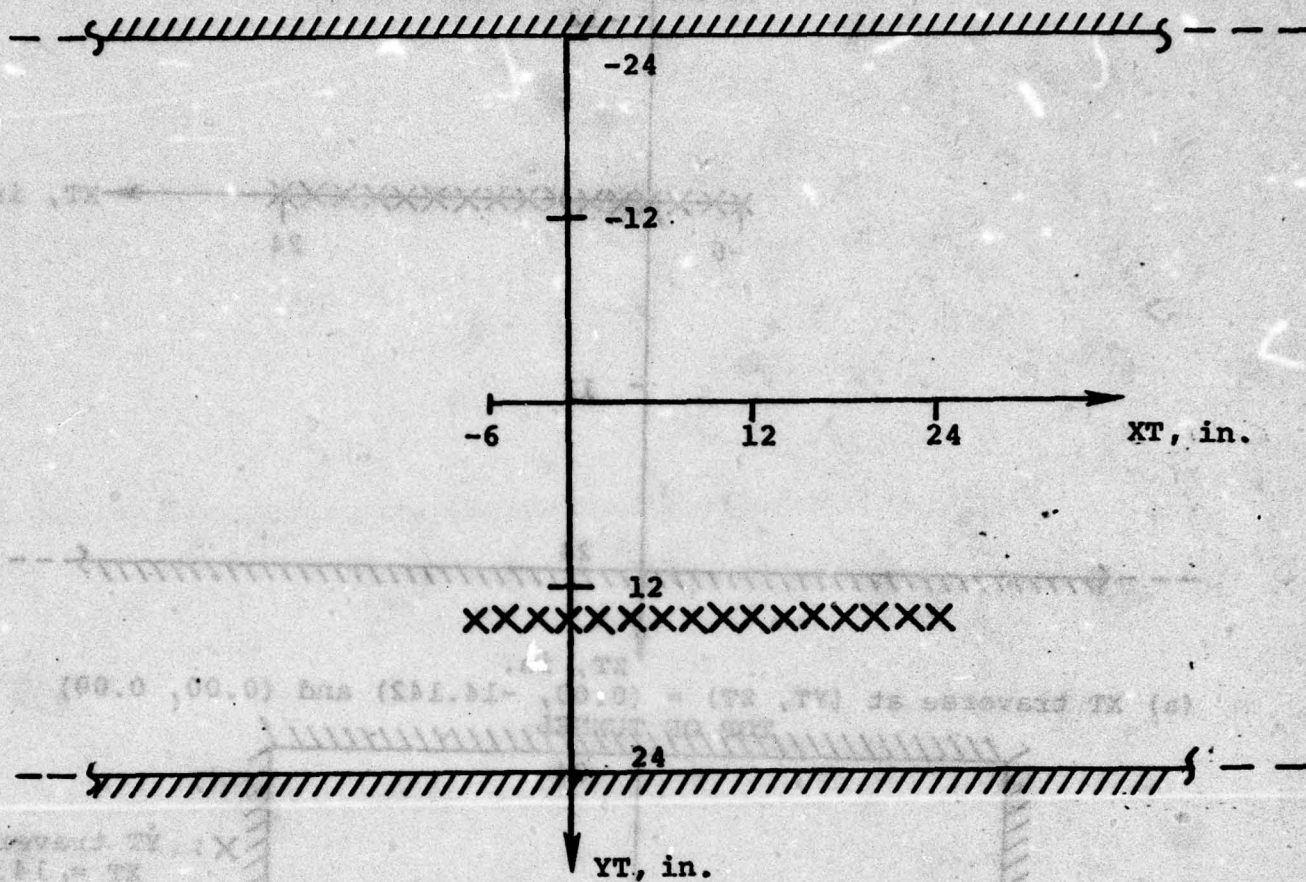
(a) XT traverse at $(YT, ZT) = (0.00, -14.142)$ and $(0.00, 0.00)$



(b) YT and ZT traverses

Figure 11.- Tunnel-Empty Survey grids.

I-40

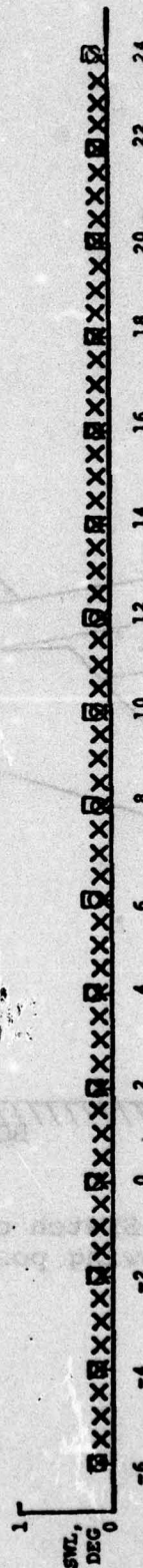
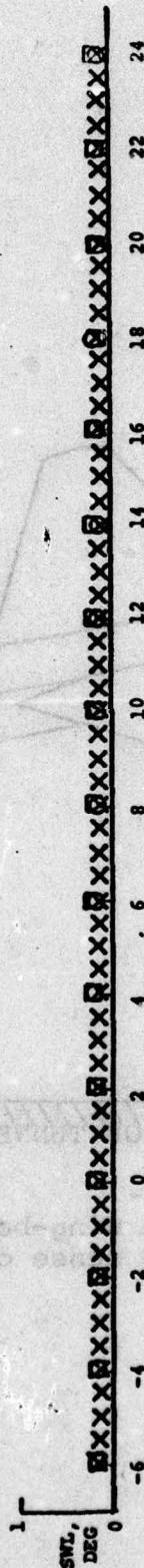
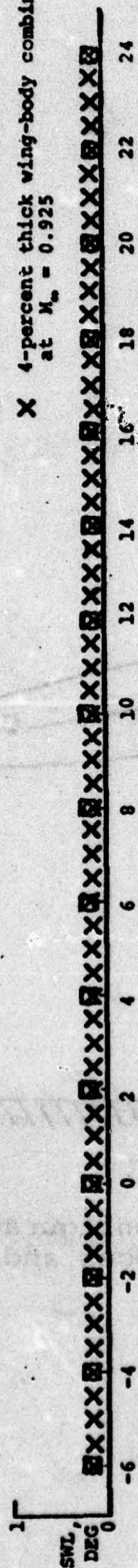


(c) XT traverse at $(YT, ZT) = (14.142, 0.0)$

Figure 11.-Concluded.

DATA

- Tunnel Empty at $M_\infty = 0.95$
 □ Tunnel Empty at $M_\infty = 0.90$
 X 4-percent thick wing-body combination
 at $M_\infty = 0.925$

Figure 12.-Local Sidewash SWL at $Y_T = 0.0$ in., $Z_T = -14.14$ in.

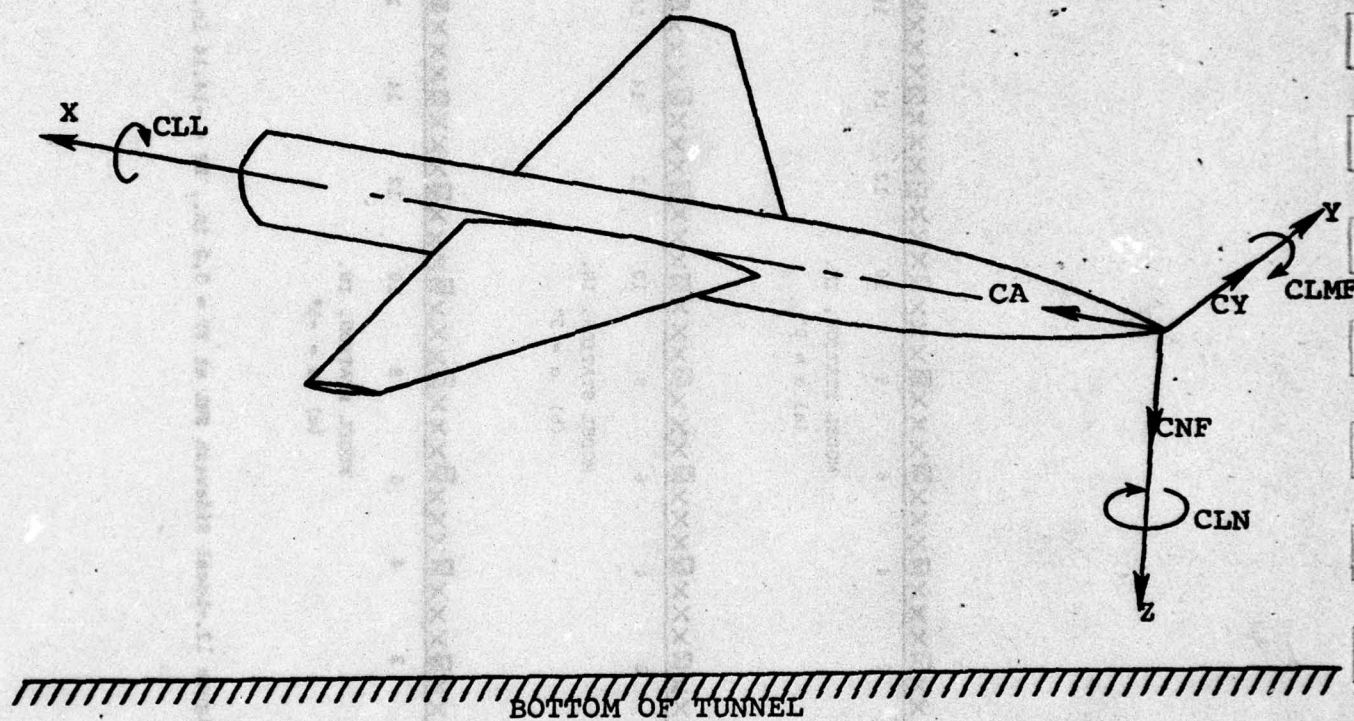


Figure 13.-Sketch of the wing-body configuration in the tunnel showing positive sense of forces and moments.

TEST PART MEXIC-6
TC-484 36 3.007

ALFA WING YP 2P
0.000 0.000 -14.14

DATE
2-2-77

WIND SUPPLY
1-701

AERC PROPULSION WIND TUNNEL
TRANSONIC 4T

POINT	XT	Y	VM	PT	Q	TT	WL	VHL/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	DTTL
5	-6.000	0.803	861.76	1944.9	453.7	82.1	0.806	1.004	1.000	-0.008	1.004	0.003	0.007	0.41	0.18
6	-4.000	0.804	863.97	1941.1	453.3	82.7	0.811	1.006	1.001	-0.010	1.006	0.003	0.007	0.42	0.15
7	-2.000	0.798	858.20	1944.0	453.0	82.8	0.806	1.008	1.001	-0.017	1.009	0.003	0.008	0.43	0.16
8	0.000	0.798	858.48	1946.0	453.2	82.9	0.807	1.009	1.001	-0.015	1.009	0.003	0.007	0.40	0.16
9	2.000	0.801	861.37	1947.5	453.5	83.4	0.806	1.006	1.001	-0.011	1.006	0.003	0.006	0.34	0.17
10	4.000	0.800	859.73	1948.1	453.3	83.2	0.809	1.008	1.000	-0.018	1.009	0.003	0.005	0.28	0.16
11	6.000	0.802	861.88	1947.7	453.2	82.9	0.808	1.007	1.001	-0.012	1.007	0.003	0.005	0.26	0.18
12	8.000	0.800	858.18	1946.2	452.9	83.3	0.812	1.007	1.001	-0.013	1.007	0.003	0.004	0.22	0.18
13	10.000	0.804	864.30	1945.3	456.9	83.4	0.811	1.008	1.001	-0.014	1.008	0.003	0.003	0.28	0.16
14	12.000	0.803	863.04	1947.2	455.7	83.2	0.808	1.006	1.001	-0.009	1.006	0.003	0.003	0.17	0.16
15	14.000	0.804	863.87	1948.8	457.6	83.2	0.807	1.004	1.001	-0.007	1.004	0.003	0.003	0.17	0.18
16	16.000	0.799	858.98	1947.9	454.3	82.7	0.803	1.005	1.001	-0.008	1.004	0.002	0.003	0.19	0.18
17	18.000	0.804	863.71	1946.0	456.8	83.3	0.807	1.004	1.000	-0.007	1.004	0.002	0.004	0.23	0.11
18	20.000	0.803	863.97	1947.6	457.2	83.8	0.805	1.002	1.001	-0.002	1.002	0.001	0.004	0.23	0.08
19	22.000	0.799	860.07	1950.9	459.4	83.6	0.797	0.997	1.001	0.008	0.997	0.001	0.005	0.28	0.08
20	24.000	0.800	859.64	1947.1	454.5	83.1	0.803	1.004	1.001	-0.005	1.004	0.002	0.005	0.29	0.09

TEST PART PX10-6 ALPS WING YP ZT RUN SURVEY
 IC-484 34 3.021 0.00 0.00 1.702

DATE
 2-2-77

AEC PRODUCTION WIND TUNNEL
 TRANSONIC 45

POINT	XT	M	VW	PT	Q	YT	Q	WT	ML	VMI/VW	PTL/PT	CPL	UT/VW	VT/VW	WT/VW	AATL	SUTL
22	-4.000	0.700	858.60	1547.9	454.0	82.7	0.869	1.011	0.998	1.001	-0.026	1.011	0.004	0.008	0.008	0.43	0.20
23	-4.000	0.700	850.22	1545.2	433.5	82.9	0.804	1.005	1.001	1.001	-0.008	1.005	0.003	0.007	0.007	0.37	0.18
24	-2.000	0.700	859.72	1546.1	453.9	83.3	0.804	1.005	1.001	1.001	-0.008	1.005	0.003	0.007	0.007	0.39	0.18
25	0.000	0.700	860.73	1548.2	464.6	83.2	0.803	1.004	1.000	1.000	-0.010	1.004	0.003	0.006	0.006	0.35	0.17
26	2.000	0.700	859.14	1548.4	450.1	83.5	0.804	1.005	1.001	1.001	-0.010	1.006	0.003	0.006	0.006	0.35	0.17
27	4.000	0.800	860.04	1547.7	455.9	82.9	0.802	1.002	1.002	1.002	-0.000	1.002	0.003	0.006	0.006	0.32	0.17
28	4.000	0.800	861.34	1544.6	455.2	82.3	0.808	1.007	1.001	1.001	-0.010	1.007	0.003	0.005	0.005	0.31	0.15
29	8.000	0.800	861.12	1543.9	450.0	83.0	0.805	1.005	1.001	1.001	-0.007	1.005	0.002	0.006	0.006	0.33	0.13
30	10.000	0.700	860.24	1550.1	450.6	84.4	0.802	1.003	1.000	1.000	-0.006	1.003	0.002	0.005	0.005	0.30	0.14
31	12.000	0.800	862.24	1550.4	455.9	83.4	0.807	1.005	1.001	1.001	-0.008	1.005	0.002	0.006	0.006	0.32	0.12
32	14.000	0.800	860.59	1547.6	455.3	82.7	0.807	1.007	1.001	1.001	-0.012	1.007	0.002	0.006	0.006	0.32	0.13
33	16.000	0.800	867.63	1545.1	450.4	83.2	0.809	1.002	1.001	1.001	-0.001	1.002	0.002	0.005	0.005	0.29	0.09
34	18.000	0.800	868.38	1545.1	450.8	83.4	0.810	1.002	1.001	1.001	-0.001	1.002	0.002	0.005	0.005	0.30	0.11
35	20.000	0.800	868.60	1548.4	460.5	84.2	0.814	1.005	1.001	1.001	-0.012	1.005	0.002	0.005	0.005	0.30	0.11
36	22.000	0.813	872.52	1548.2	463.7	83.3	0.817	1.005	1.001	1.001	-0.007	1.005	0.002	0.005	0.005	0.31	0.09
37	24.000	0.803	863.01	1548.6	455.5	83.4	0.803	1.003	1.001	1.001	-0.003	1.003	0.002	0.006	0.006	0.32	0.10

[illegible]

TEST PART 2010-6 ALPHA WING XT 27 SURVEY 1-1 DATE 20-2-77 AEDC PRODUCTION WIND TUNNEL TC-484 33 2.995

POINT	YT	W	VM	PT	Q	TT	VL	VM/VL	PT/PT	CPL	UT/VM	VT/VM	WT/VM	AATL	SWTL
23	14.000	0.706	853.26	1536.7	448.6	79.7	0.804	1.010	1.000	-0.019	1.010	0.001	0.005	0.30	0.08
24	12.000	0.706	853.91	1532.9	449.3	79.9	0.804	1.007	1.002	-0.010	1.007	-0.002	-0.005	-0.26	-0.09
25	10.000	0.803	840.32	1432.5	452.5	80.1	0.805	1.003	1.001	-0.003	1.003	-0.001	-0.001	-0.07	-0.08
26	8.000	0.707	854.02	1537.3	449.9	79.7	0.802	1.006	1.001	-0.009	1.006	-0.001	-0.002	-0.12	-0.04
27	6.000	0.799	854.16	1434.1	440.0	79.5	0.803	1.004	1.001	-0.005	1.004	0.002	-0.004	-0.21	0.14
28	4.000	0.807	854.44	1533.2	450.8	80.0	0.803	1.003	1.001	-0.004	1.003	0.002	-0.001	-0.06	0.10
29	2.000	0.706	856.43	1536.4	440.7	79.9	0.803	1.004	1.001	-0.037	1.004	0.003	0.002	0.11	0.17
30	0.000	0.800	858.09	1536.9	451.4	80.5	0.801	1.001	1.001	-0.000	1.001	0.002	0.005	0.29	0.12
31	-2.000	0.801	849.82	1438.2	452.8	80.7	0.805	1.005	1.000	-0.009	1.005	-0.000	0.001	0.08	-0.08
32	-4.000	0.706	857.87	1539.8	451.8	81.4	0.803	1.004	1.001	-0.006	1.004	0.000	0.000	0.00	-0.04
33	-6.000	0.706	857.40	1540.3	451.9	80.9	0.804	1.005	1.001	-0.008	1.005	-0.001	0.005	0.31	0.01
34	-8.000	0.706	857.45	1537.7	451.4	80.5	0.802	1.003	1.001	-0.003	1.003	0.000	0.003	0.20	0.01
35	-10.000	0.801	858.40	1536.1	451.8	80.2	0.804	1.004	1.001	-0.005	1.004	0.001	0.004	0.24	0.06
36	-12.000	0.800	856.24	1537.0	451.7	80.6	0.804	1.005	1.001	-0.008	1.005	0.002	0.002	0.14	0.13
37	-14.000	0.800	856.45	1538.5	452.1	81.0	0.804	1.004	1.000	-0.008	1.004	0.000	0.002	0.14	0.01

TEST PAB- REX10-4 ALPHA WING TT 2T RUN SURVEY DATE 2-2-77 AEDC PROPOSITION WIND TUNNEL
 TC-484 37 3.001 0.00 0.00 -14.14 1-701 TRANSONIC 45

POINT	X	Y	Z	U	V	W	DT	TT	VL	VH/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	SAUL
3	-6.000	0.000	0.000	917.31	1516.5	483.1	88.6	0.861	1.005	1.005	1.001	-0.009	1.005	0.003	0.007	0.42	0.18
4	-4.000	0.001	0.001	913.09	1523.0	481.4	88.4	0.860	1.009	1.009	1.001	-0.016	1.009	0.003	0.008	0.43	0.19
7	-2.000	0.044	0.044	908.27	1524.5	478.4	88.4	0.855	1.009	1.009	1.001	-0.017	1.009	0.004	0.007	0.43	0.20
8	0.000	0.048	0.048	909.43	1522.7	478.6	88.6	0.857	1.009	1.009	1.001	-0.017	1.009	0.003	0.007	0.40	0.19
9	2.000	0.042	0.042	904.32	1522.3	475.1	88.6	0.853	1.012	1.012	1.002	-0.020	1.012	0.003	0.006	0.36	0.18
10	4.000	0.040	0.040	902.35	1523.8	474.0	88.5	0.851	1.011	1.011	1.001	-0.020	1.011	0.003	0.005	0.31	0.18
11	6.000	0.037	0.037	900.33	1523.4	472.4	88.6	0.848	1.011	1.011	1.001	-0.019	1.011	0.003	0.005	0.29	0.18
12	8.000	0.038	0.038	898.24	1523.6	473.2	88.1	0.847	1.009	1.009	1.001	-0.016	1.009	0.003	0.004	0.24	0.16
13	10.000	0.041	0.041	897.36	1519.5	473.2	88.0	0.847	1.006	1.006	1.001	-0.009	1.006	0.003	0.003	0.20	0.18
14	12.000	0.044	0.044	897.42	1520.8	476.9	88.0	0.851	1.006	1.006	1.001	-0.009	1.006	0.003	0.003	0.23	0.14
15	14.000	0.050	0.050	896.46	1519.6	484.5	88.0	0.861	1.002	1.002	1.001	-0.002	1.002	0.003	0.003	0.20	0.13
16	16.000	0.083	0.083	897.28	1518.0	499.3	88.0	0.883	0.999	0.999	1.000	0.002	0.999	0.003	0.004	0.21	0.13
17	18.000	0.066	0.066	894.46	1517.0	513.4	88.3	0.864	0.996	0.996	1.001	0.010	0.996	0.002	0.004	0.24	0.13
18	20.000	0.078	0.078	892.07	1515.6	523.9	87.7	0.921	0.993	0.993	1.002	0.016	0.993	0.003	0.005	0.26	0.14
19	22.000	0.077	0.077	896.02	1523.4	522.1	88.0	0.919	0.999	0.999	1.001	0.004	0.999	0.003	0.005	0.28	0.15
20	24.000	0.032	0.032	894.15	1526.3	489.5	88.0	0.836	1.005	1.005	1.001	-0.005	1.005	0.003	0.006	0.33	0.10

TEST PART RPX10-6 ALPA WING PT 22 RTW SUPPLY DATE 2-2-72 AEDC PROPULSION WIND TUNNEL
 XC-484 37 2.932 0.000 0.00 0.00 1-102

POINT	ST	W	W	W	PT	Q	TT	W	W	W	PT/PT	CPL	UT/UT	VT/VT	WT/WT	AAZL	SPZL
22	-4.000	0.848	909.70	1519.2	477.0	477.0	84.1	0.860	1.012	1.001	-0.024	1.012	0.003	0.007	0.007	0.43	0.19
23	-4.000	0.849	910.55	1521.9	479.6	479.6	87.5	0.855	1.005	1.001	-0.009	1.005	0.003	0.007	0.007	0.39	0.19
24	-2.000	0.851	912.51	1519.8	480.1	480.1	87.8	0.847	1.006	1.001	-0.010	1.006	0.004	0.007	0.007	0.39	0.21
25	0.000	0.850	911.11	1521.1	479.7	479.7	87.6	0.856	1.007	1.001	-0.011	1.007	0.004	0.006	0.006	0.34	0.20
26	2.000	0.848	909.44	1519.3	477.8	477.8	87.4	0.856	1.006	1.002	-0.011	1.006	0.003	0.006	0.006	0.33	0.19
27	4.000	0.845	907.55	1521.0	477.1	477.1	88.4	0.853	1.008	1.001	-0.015	1.008	0.003	0.006	0.006	0.33	0.19
28	6.000	0.843	904.54	1524.0	475.6	475.6	88.1	0.850	1.006	1.001	-0.013	1.006	0.003	0.006	0.006	0.34	0.18
29	8.000	0.842	904.35	1522.5	475.4	475.4	88.0	0.849	1.007	1.002	-0.010	1.006	0.003	0.006	0.006	0.33	0.18
30	10.000	0.847	908.64	1520.2	477.5	477.5	89.0	0.852	1.005	1.001	-0.008	1.005	0.003	0.005	0.005	0.31	0.18
31	12.000	0.844	914.40	1519.5	481.4	481.4	88.0	0.858	1.004	1.001	-0.006	1.004	0.003	0.004	0.004	0.31	0.16
32	14.000	0.843	924.03	1520.2	487.7	487.7	87.1	0.867	1.004	1.001	-0.003	1.004	0.003	0.003	0.003	0.28	0.17
33	16.000	0.874	914.29	1517.3	494.6	494.6	87.4	0.879	1.003	1.002	-0.002	1.003	0.003	0.003	0.003	0.29	0.18
34	18.000	0.891	949.23	1514.6	502.4	502.4	88.0	0.893	1.002	1.002	-0.002	1.002	0.003	0.003	0.003	0.29	0.17
35	20.000	0.888	944.31	1517.5	501.4	501.4	88.0	0.893	1.007	1.000	-0.015	1.007	0.003	0.003	0.003	0.30	0.17
36	22.000	0.844	904.24	1527.2	477.7	477.7	88.6	0.848	1.004	1.001	-0.006	1.004	0.003	0.003	0.003	0.34	0.18
37	24.000	0.854	915.74	1520.0	482.0	482.0	88.3	0.858	1.004	1.002	-0.003	1.004	0.003	0.003	0.003	0.34	0.16

TEST POINT RFX10-6
TC-684 37 3.013

DATE
20-2-79

RMV SURVEY
1-703

ST
0.00

WT
14.14

ALPHA
0.000

W
0.000

WV
0.000

WT/VH
0.004

WT/VH
0.004

AEDC PROPOULSTION WIND TUNNEL
TRANSONIC 45

POINT	XY	M	W	WV	WT	Q	TY	WL	VHL/VH	PTI/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	SWTL
36	-4.000	0.838	0.10.43	1524.2	483.9	483.9	88.7	0.835	0.997	0.999	0.009	0.997	0.004	0.007	0.40	0.21
40	-4.000	0.844	0.17.38	1523.0	483.8	483.8	88.8	0.841	1.006	1.001	-0.009	1.006	0.003	0.003	0.18	0.18
41	-7.000	0.853	0.19.38	1524.2	482.7	482.7	89.1	0.860	1.006	1.001	-0.011	1.006	0.003	0.003	0.15	0.16
42	0.000	0.849	0.11.14	1524.3	479.9	479.9	89.0	0.856	1.007	1.002	-0.012	1.007	0.003	0.003	0.14	0.14
43	2.000	0.841	0.05.34	1525.0	474.6	474.6	89.2	0.850	1.007	1.002	-0.011	1.007	0.002	0.003	0.15	0.11
44	4.000	0.840	0.02.43	1522.4	474.0	474.0	89.0	0.846	1.006	1.001	-0.010	1.006	0.002	0.002	0.13	0.12
45	6.000	0.838	0.01.56	1521.2	472.8	472.8	89.3	0.845	1.006	1.001	-0.010	1.006	0.002	0.002	0.14	0.12
46	8.000	0.840	0.02.46	1522.2	473.8	473.8	89.3	0.846	1.006	1.001	-0.009	1.006	0.002	0.002	0.12	0.10
47	10.000	0.844	0.06.28	1522.1	476.4	476.4	89.3	0.850	1.006	1.001	-0.009	1.005	0.002	0.002	0.10	0.11
48	12.000	0.850	0.11.73	1521.4	479.4	479.4	89.0	0.855	1.004	1.001	-0.007	1.004	0.002	0.002	0.12	0.13
49	14.000	0.859	0.20.00	1517.3	484.1	484.1	89.1	0.863	1.004	1.002	-0.003	1.004	0.002	0.002	0.12	0.11
50	16.000	0.870	0.30.20	1517.7	481.0	481.0	89.1	0.876	1.006	1.001	-0.010	1.006	0.002	0.001	0.08	0.12
51	18.000	0.868	0.10.64	1526.9	480.9	480.9	89.0	0.868	0.998	1.001	0.005	0.998	0.002	0.002	0.10	0.09
52	20.000	0.854	0.16.84	1520.0	483.0	483.0	87.9	0.858	1.003	1.002	-0.002	1.003	0.002	0.001	0.09	0.10
53	22.000	0.848	0.00.60	1521.3	478.7	478.7	87.7	0.855	1.007	1.002	-0.010	1.007	0.002	0.002	0.10	0.12
54	24.000	0.846	0.07.70	1518.0	476.4	476.4	87.6	0.855	1.009	1.002	-0.015	1.009	0.002	0.002	0.10	0.09

TEST PLAN REX10-6 ALPH 0.000 MACH 14.00 27 0.00 RUN SURVEY DATE 2-2-77 AEDC PROPELLION WIND TUNNEL TRANSONIC 47

POINT	Y	V	W	PT	Q	PT	W	VHL/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	SAATL
22	16.000	0.849	904.13	1917.7	479.4	87.3	0.854	1.009	1.001	-0.017	1.009	0.002	0.006	0.32	0.09
24	12.000	0.851	912.30	1918.7	479.6	87.4	0.856	1.009	1.000	-0.011	1.005	-0.000	-0.002	-0.09	-0.01
25	12.000	0.851	910.67	1918.1	479.1	86.7	0.856	1.006	1.001	-0.010	1.006	-0.000	-0.000	-0.02	-0.02
26	8.000	0.853	913.24	1916.7	480.0	87.1	0.858	1.005	1.001	-0.008	1.005	-0.000	-0.001	-0.06	-0.01
27	6.000	0.848	909.43	1918.6	479.2	86.8	0.853	1.004	1.002	-0.006	1.004	0.003	-0.003	-0.14	-0.17
28	4.000	0.851	911.79	1918.0	479.3	87.3	0.854	1.003	1.001	-0.004	1.003	0.002	-0.000	-0.02	-0.12
29	2.000	0.848	910.13	1920.0	479.8	87.3	0.857	1.008	1.001	-0.015	1.008	0.003	0.003	0.16	0.16
30	0.000	0.851	912.27	1922.3	480.5	88.1	0.856	1.005	1.000	-0.009	1.005	0.003	0.006	0.34	0.16
31	-2.000	0.848	909.73	1921.1	479.5	88.0	0.854	1.006	1.001	-0.009	1.006	0.001	0.001	0.07	0.04
32	-4.000	0.851	912.01	1920.9	480.0	88.0	0.855	1.005	1.001	-0.008	1.005	0.001	0.001	0.03	0.07
33	-6.000	0.848	908.10	1922.6	479.8	87.3	0.854	1.010	1.002	-0.016	1.010	0.000	0.006	0.32	0.03
34	-8.000	0.850	910.51	1918.9	478.7	87.3	0.856	1.002	1.001	-0.012	1.007	0.001	0.005	0.26	0.06
35	-10.000	0.851	911.46	1916.8	478.8	87.2	0.856	1.005	1.001	-0.008	1.005	0.002	0.004	0.25	0.12
36	-12.000	0.849	910.17	1919.2	478.4	87.6	0.856	1.008	1.001	-0.014	1.008	0.003	0.003	0.16	0.18
37	-14.000	0.849	910.45	1919.4	479.5	87.6	0.855	1.007	1.001	-0.011	1.007	0.001	0.003	0.16	0.06

TEST DATA PERIOD-6
20-484 36 2.988

ALPS WTC XT
0.00 0.00

DATE 2-2-77

AEDC PROPLATION WIND TUNNEL
TRANSMIC 47

POINT	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180	189	198	207	216	225	234	243	252	261	270	279	288	297	306	315	324	333	342	351	360	369	378	387	396	405	414	423	432	441	450	459	468	477	486	495	504	513	522	531	540	549	558	567	576	585	594	603	612	621	630	639	648	657	666	675	684	693	702	711	720	729	738	747	756	765	774	783	792	801	810	819	828	837	846	855	864	873	882	891	900	909	918	927	936	945	954	963	972	981	990	999	1008	1017	1026	1035	1044	1053	1062	1071	1080	1089	1098	1107	1116	1125	1134	1143	1152	1161	1170	1179	1188	1197	1206	1215	1224	1233	1242	1251	1260	1269	1278	1287	1296	1305	1314	1323	1332	1341	1350	1359	1368	1377	1386	1395	1404	1413	1422	1431	1440	1449	1458	1467	1476	1485	1494	1503	1512	1521	1530	1539	1548	1557	1566	1575	1584	1593	1602	1611	1620	1629	1638	1647	1656	1665	1674	1683	1692	1701	1710	1719	1728	1737	1746	1755	1764	1773	1782	1791	1800	1809	1818	1827	1836	1845	1854	1863	1872	1881	1890	1899	1908	1917	1926	1935	1944	1953	1962	1971	1980	1989	1998	2007	2016	2025	2034	2043	2052	2061	2070	2079	2088	2097	2106	2115	2124	2133	2142	2151	2160	2169	2178	2187	2196	2205	2214	2223	2232	2241	2250	2259	2268	2277	2286	2295	2304	2313	2322	2331	2340	2349	2358	2367	2376	2385	2394	2403	2412	2421	2430	2439	2448	2457	2466	2475	2484	2493	2502	2511	2520	2529	2538	2547	2556	2565	2574	2583	2592	2601	2610	2619	2628	2637	2646	2655	2664	2673	2682	2691	2700	2709	2718	2727	2736	2745	2754	2763	2772	2781	2790	2799	2808	2817	2826	2835	2844	2853	2862	2871	2880	2889	2898	2907	2916	2925	2934	2943	2952	2961	2970	2979	2988	2997	3006	3015	3024	3033	3042	3051	3060	3069	3078	3087	3096	3105	3114	3123	3132	3141	3150	3159	3168	3177	3186	3195	3204	3213	3222	3231	3240	3249	3258	3267	3276	3285	3294	3303	3312	3321	3330	3339	3348	3357	3366	3375	3384	3393	3402	3411	3420	3429	3438	3447	3456	3465	3474	3483	3492	3501	3510	3519	3528	3537	3546	3555	3564	3573	3582	3591	3600	3609	3618	3627	3636	3645	3654	3663	3672	3681	3690	3699	3708	3717	3726	3735	3744	3753	3762	3771	3780	3789	3798	3807	3816	3825	3834	3843	3852	3861	3870	3879	3888	3897	3906	3915	3924	3933	3942	3951	3960	3969	3978	3987	3996	4005	4014	4023	4032	4041	4050	4059	4068	4077	4086	4095	4104	4113	4122	4131	4140	4149	4158	4167	4176	4185	4194	4203	4212	4221	4230	4239	4248	4257	4266	4275	4284	4293	4302	4311	4320	4329	4338	4347	4356	4365	4374	4383	4392	4401	4410	4419	4428	4437	4446	4455	4464	4473	4482	4491	4500	4509	4518	4527	4536	4545	4554	4563	4572	4581	4590	4599	4608	4617	4626	4635	4644	4653	4662	4671	4680	4689	4698	4707	4716	4725	4734	4743	4752	4761	4770	4779	4788	4797	4806	4815	4824	4833	4842	4851	4860	4869	4878	4887	4896	4905	4914	4923	4932	4941	4950	4959	4968	4977	4986	4995	5004	5013	5022	5031	5040	5049	5058	5067	5076	5085	5094	5103	5112	5121	5130	5139	5148	5157	5166	5175	5184	5193	5202	5211	5220	5229	5238	5247	5256	5265	5274	5283	5292	5301	5310	5319	5328	5337	5346	5355	5364	5373	5382	5391	5400	5409	5418	5427	5436	5445	5454	5463	5472	5481	5490	5499	5508	5517	5526	5535	5544	5553	5562	5571	5580	5589	5598	5607	5616	5625	5634	5643	5652	5661	5670	5679	5688	5697	5706	5715	5724	5733	5742	5751	5760	5769	5778	5787	5796	5805	5814	5823	5832	5841	5850	5859	5868	5877	5886	5895	5904	5913	5922	5931	5940	5949	5958	5967	5976	5985	5994	6003	6012	6021	6030	6039	6048	6057	6066	6075	6084	6093	6102	6111	6120	6129	6138	6147	6156	6165	6174	6183	6192	6201	6210	6219	6228	6237	6246	6255	6264	6273	6282	6291	6300	6309	6318	6327	6336	6345	6354	6363	6372	6381	6390	6399	6408	6417	6426	6435	6444	6453	6462	6471	6480	6489	6498	6507	6516	6525	6534	6543	6552	6561	6570	6579	6588	6597	6606	6615	6624	6633	6642	6651	6660	6669	6678	6687	6696	6705	6714	6723	6732	6741	6750	6759	6768	6777	6786	6795	6804	6813	6822	6831	6840	6849	6858	6867	6876	6885	6894	6903	6912	6921	6930	6939	6948	6957	6966	6975	6984	6993	7002	7011	7020	7029	7038	7047	7056	7065	7074	7083	7092	7101	7110	7119	7128	7137	7146	7155	7164	7173	7182	7191	7200	7209	7218	7227	7236	7245	7254	7263	7272	7281	7290	7299	7308	7317	7326	7335	7344	7353	7362	7371	7380	7389	7398	7407	7416	7425	7434	7443	7452	7461	7470	7479	7488	7497	7506	7515	7524	7533	7542	7551	7560	7569	7578	7587	7596	7605	7614	7623	7632	7641	7650	7659	7668	7677	7686	7695	7704	7713	7722	7731	7740	7749	7758	7767	7776	7785	7794	7803	7812	7821	7830	7839	7848	7857	7866	7875	7884	7893	7902	7911	7920	7929	7938	7947	7956	7965	7974	7983	7992	8001	8010	8019	8028	8037	8046	8055	8064	8073	8082	8091	8100	8109	8118	8127	8136	8145	8154	8163	8172	8181	8190	8199	8208	8217	8226	8235	8244	8253	8262	8271	8280	8289	8298	8307	8316	8325	8334	8343	8352	8361	8370	8379	8388	8397	8406	8415	8424	8433	8442	8451	8460	8469	8478	8487	8496	8505	8514	8523	8532	8541	8550	8559	8568	8577	8586	8595	8604	8613	8622	8631	8640	8649	8658	8667	8676	8685	8694	8703	8712	8721	8730	8739	8748	8757	8766	8775	8784	8793	8802	8811	8820	8829	8838	8847	8856	8865	8874	8883	8892	8901	8910	8919	8928	8937	8946	8955	8964	8973	8982	8991	9000	9009	9018	9027	9036	9045	9054	9063	9072	9081	9090	9099	9108	9117	9126	9135	9144	9153	9162	9171	9180	9189	9198	9207	9216	9225	9234	9243	9252	9261	9270	9279	9288	9297	9306	9315	9324	9333	9342	9351	9360	9369	9378	9387	9396	9405	9414	9423	9432	9441	9450	9459	9468	9477	9486	9495	9504	9513	9522	9531	9540	9549	9558	9567	9576	9585	9594	9603	9612	9621	9630	9639	9648	9657	9666	9675	9684	9693	9702	9711	9720	9729	9738	9747	9756	9765	9774	9783	9792	9801	9810	9819	9828	9837	9846	9855	9864	9873	9882	9891	9900	9909	9918	9927	9936	9945	9954	9963	9972	9981	9990	10000
UT/VH	1.005	1.005	1.007	1.007	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005</																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

TEST	PIPT	REV10-5	ALFA	WING	VT	ST	RUE SURVEY	DATE	AEDC PROPELLSION WIND TUNNEL					
TC-484	34	2,996	0.00	14.14	1.701	2-3-77			TRANSONIC 47					
POINT	ST	H	W	DT	0	TT	WL	VHL/VH	DT/PT	CPL	UT/VH	WT/VH	AATL	SMTL
5	-2.000	0.043	947.13	1460.5	501.8	90.5	0.904	1.000	1.000	-0.000	1.000	0.007	0.39	0.17
6	-4.000	0.095	950.36	1465.2	500.6	90.4	0.905	1.006	1.001	-0.011	1.006	0.003	0.39	0.17
7	-2.000	0.094	954.13	1465.5	497.7	90.6	0.905	1.005	1.001	-0.008	1.005	0.003	0.36	0.17
8	-2.000	0.045	947.14	1465.6	493.6	90.4	0.903	1.006	1.000	-0.012	1.006	0.003	0.32	0.19
9	-2.000	0.091	951.72	1462.8	495.1	90.4	0.903	1.008	1.002	-0.011	1.007	0.003	0.31	0.17
10	-4.000	0.066	956.10	1463.3	498.5	90.0	0.900	1.003	1.002	-0.004	1.003	0.005	0.31	0.19
11	-6.000	0.043	952.88	1462.9	496.4	90.9	0.908	1.005	1.001	-0.008	1.005	0.004	0.27	0.19
12	-9.001	0.074	963.75	1461.8	502.4	90.0	0.907	1.003	1.001	-0.003	1.003	0.003	0.23	0.19
13	-12.000	0.048	947.25	1465.0	493.6	90.8	0.902	1.005	1.001	-0.013	1.005	0.003	0.19	0.17
14	-12.000	0.047	950.84	1463.7	481.0	90.1	0.894	1.007	1.001	-0.012	1.007	0.003	0.21	0.18
15	-14.000	0.087	943.49	1466.6	480.6	89.7	0.901	0.998	1.002	0.008	0.998	0.002	0.21	0.18
16	-14.000	0.017	964.78	1466.1	495.0	89.8	0.900	0.998	1.001	0.005	0.998	0.002	0.14	0.14
17	-18.000	0.064	929.44	1467.5	492.0	90.7	0.902	1.006	1.001	-0.009	1.006	0.003	0.21	0.18
18	-20.000	0.074	916.44	1464.6	493.4	89.9	0.895	0.996	1.001	0.005	0.999	0.002	0.25	0.13
19	-20.000	0.074	935.60	1463.6	485.8	90.1	0.890	0.996	1.001	0.005	0.996	0.002	0.27	0.13
20	-24.000	0.083	943.81	1466.4	491.6	90.3	0.890	0.998	1.003	0.009	0.998	0.002	0.28	0.18
21	-24.000	0.083	943.81	1466.4	491.6	90.3	0.890	0.998	1.003	0.009	0.998	0.002	0.28	0.18

TEST		DATE		AEDC PROPULSION WIND TUNNEL		TRANSONIC 42	
TC-484		2-2-77		2-2-77		2-2-77	
POINT		SURVEY		SURVEY		SURVEY	
TC-484		1-703		1-703		1-703	
POINT	TEST	WING	WING	WING	WING	WING	WING
39	4.000	0.842	0.842	0.842	0.842	0.842	0.842
40	4.000	0.842	0.842	0.842	0.842	0.842	0.842
41	4.000	0.842	0.842	0.842	0.842	0.842	0.842
42	4.000	0.842	0.842	0.842	0.842	0.842	0.842
43	4.000	0.842	0.842	0.842	0.842	0.842	0.842
44	4.000	0.842	0.842	0.842	0.842	0.842	0.842
45	4.000	0.842	0.842	0.842	0.842	0.842	0.842
46	4.000	0.842	0.842	0.842	0.842	0.842	0.842
47	4.000	0.842	0.842	0.842	0.842	0.842	0.842
48	4.000	0.842	0.842	0.842	0.842	0.842	0.842
49	4.000	0.842	0.842	0.842	0.842	0.842	0.842
50	4.000	0.842	0.842	0.842	0.842	0.842	0.842
51	4.000	0.842	0.842	0.842	0.842	0.842	0.842
52	4.000	0.842	0.842	0.842	0.842	0.842	0.842
53	4.000	0.842	0.842	0.842	0.842	0.842	0.842
54	4.000	0.842	0.842	0.842	0.842	0.842	0.842

TEST PART		RPX10-6	ALFA	WING	XT	2P	RUN SURVEY		DATE		AEDC PROPULSION WIND TUNNEL				
TC-484		38	2.997	0.000	NOVE 14.00	0.00	1-1	2-2-77	TPANSONEC 47						
POINT	YT	U	VM	PT	G	TT	WL	VHL/VH	DTL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	BMFL
21	14.000	0.898	947.83	1492.6	499.3	90.0	0.901	1.003	1.000	-0.005	1.003	0.002	0.005	0.28	0.09
23	12.000	0.807	947.14	1489.6	497.9	90.0	0.901	1.003	1.004	0.001	1.003	0.001	-0.001	-0.06	0.08
24	10.000	0.808	957.64	1492.6	499.2	90.0	0.900	1.002	1.002	-0.001	1.002	-0.000	-0.000	-0.01	-0.01
25	8.000	0.808	958.92	1492.7	499.9	90.3	0.901	1.002	1.001	-0.002	1.002	0.000	-0.001	-0.08	0.02
26	6.000	0.808	958.68	1493.0	500.2	89.6	0.901	1.002	1.001	-0.001	1.002	0.004	-0.002	-0.14	0.21
27	4.000	0.807	958.87	1490.9	498.9	89.1	0.901	1.001	1.001	-0.001	1.001	0.003	-0.001	-0.04	0.14
28	2.000	0.800	958.95	1488.0	499.1	89.9	0.902	1.002	1.001	-0.001	1.001	0.004	0.002	0.13	0.22
29	0.000	0.801	940.23	1491.3	500.7	89.4	0.904	1.002	1.001	-0.003	1.002	0.003	0.005	0.30	0.18
30	-2.000	0.800	958.12	1489.1	498.9	89.0	0.902	1.003	1.002	-0.002	1.003	0.001	0.001	0.07	0.08
31	-4.000	0.800	958.75	1488.9	498.1	89.3	0.902	1.002	1.001	-0.003	1.002	0.001	0.001	0.03	0.08
32	-6.000	0.800	948.24	1489.8	499.9	89.6	0.902	1.003	1.002	-0.003	1.003	0.001	0.001	0.28	0.04
33	-8.000	0.808	954.93	1488.8	498.1	89.5	0.901	1.003	1.002	-0.003	1.003	0.002	0.004	0.25	0.11
34	-10.000	0.807	956.72	1488.5	497.5	89.1	0.900	1.003	1.002	-0.002	1.003	0.002	0.004	0.26	0.13
35	-12.000	0.807	956.08	1489.1	497.6	89.1	0.900	1.002	1.001	-0.002	1.002	0.003	0.003	0.17	0.15
36	-14.000	0.807	956.48	1489.5	497.8	89.3	0.901	1.003	1.001	-0.005	1.003	0.001	0.003	0.17	0.07

TEST POINT		PMT		RP10-4		LIPA		WING		XT		YT		RUN SURVEY		DATE		AEDC PROPELLSION WIND TUNNEL				
TC-484		30		3.005		0.000		NONE		14.00		0.00		1-		20-2-77		TRANSONIC 47				
POINT	ZT	P	VM	PT	O	YT	VL	VHL/VH	STL/ST	CPL	UT/VH	VT/VH	WT/VH	AATL	SMTL							
5	14.000	0.898	947.34	1492.2	499.4	88.9	0.902	1.003	1.001	-0.005	1.003	0.002	0.005	0.27	0.13							
6	12.000	0.897	945.05	1489.8	497.9	88.7	0.900	1.002	1.002	-0.001	1.002	0.004	0.002	0.13	0.23							
7	10.000	0.897	945.06	1485.8	496.7	88.6	0.900	1.002	1.002	-0.001	1.002	0.007	-0.001	-0.09	0.38							
8	8.000	0.896	944.94	1484.1	498.7	89.8	0.902	1.003	1.000	-0.004	1.002	0.007	-0.001	-0.09	0.38							
9	6.000	0.896	944.14	1485.5	501.2	89.8	0.903	1.003	1.001	-0.005	1.003	0.006	-0.004	-0.21	0.34							
10	4.000	0.898	947.40	1486.1	500.6	89.4	0.901	1.003	1.002	-0.003	1.003	0.006	-0.002	-0.14	0.36							
11	2.000	0.897	944.56	1488.7	497.2	89.0	0.900	1.002	1.002	-0.001	1.002	0.003	0.001	0.06	0.19							
12	0.000	0.897	944.27	1488.2	497.1	89.5	0.900	1.003	1.001	-0.003	1.003	0.003	0.003	0.28	0.18							
13	-2.000	0.897	947.19	1492.0	498.1	90.0	0.901	1.003	1.001	-0.005	1.003	0.004	0.005	0.31	0.22							
14	-4.000	0.897	944.37	1495.2	499.5	89.6	0.900	1.003	1.001	-0.004	1.003	0.003	0.004	0.26	0.17							
15	-6.000	0.898	944.19	1493.2	497.9	89.9	0.908	1.003	1.001	-0.002	1.003	0.001	0.004	0.25	0.05							
16	-8.000	0.895	945.16	1488.9	494.5	90.0	0.897	1.002	1.001	-0.001	1.002	-0.000	0.004	0.25	-0.02							
17	-10.000	0.895	944.36	1493.2	498.0	90.0	0.899	1.003	1.001	-0.005	1.003	0.001	0.004	0.23	0.05							
18	-12.000	0.895	944.74	1495.0	498.2	90.0	0.897	1.002	1.001	-0.004	1.002	0.003	0.004	0.23	0.19							
19	-14.000	0.894	944.01	1493.8	497.5	89.6	0.896	1.002	1.001	-0.001	1.002	0.003	0.004	0.23	0.16							

TEST	PART	REFID-6	ALPA	WTC	Y7	27	WIM SURVEY		DATE		AEDC PROPULSION WIND TUNNEL				
TC-484	41	2.971	0.000	MOVE	0.00	-14.14	1.701	1.701	3-2-77	3-2-77	TRANSONIC 47				
POINT	XT	P	VW	PT	O	YT	WL	VWL/VW	PTL/PT	CPL	UT/VW	VT/VW	WT/VW	ATL	STL
5	-6.000	0.625	918.51	1450.0	488.5	86.0	0.924	1.000	1.000	0.001	1.000	0.003	0.007	0.40	0.16
6	-4.000	0.605	910.43	1444.0	480.3	85.8	0.911	1.005	1.001	-0.008	1.005	0.003	0.007	0.41	0.17
7	-2.000	0.605	911.56	1448.0	483.1	85.9	0.911	1.005	1.002	-0.007	1.005	0.003	0.007	0.41	0.17
8	0.000	0.634	916.44	1447.6	503.5	85.7	0.926	0.993	1.001	0.016	0.993	0.003	0.007	0.39	0.16
9	2.000	0.643	914.68	1452.6	504.9	85.7	0.934	0.992	1.001	0.017	0.992	0.003	0.006	0.36	0.17
10	4.000	0.644	916.64	1451.8	510.2	86.1	0.936	0.992	1.002	0.019	0.992	0.003	0.006	0.33	0.19
11	5.000	0.624	907.50	1450.0	510.9	86.1	0.937	0.992	1.001	0.018	0.992	0.003	0.005	0.29	0.17
12	6.000	0.647	908.23	1451.3	511.9	85.9	0.937	0.992	1.002	0.019	0.992	0.003	0.005	0.27	0.18
13	10.000	0.641	1002.28	1448.6	512.0	85.8	0.937	0.987	1.002	0.039	0.987	0.002	0.005	0.27	0.13
14	12.000	0.642	1008.73	1450.8	516.9	85.7	0.941	0.984	1.000	0.031	0.984	0.002	0.005	0.29	0.12
15	14.000	0.644	1013.60	1448.6	519.1	85.7	0.943	0.981	1.001	0.040	0.981	0.002	0.005	0.30	0.12
16	16.000	0.644	1018.93	1448.2	519.6	85.8	0.944	0.981	1.001	0.038	0.981	0.002	0.005	0.31	0.13
17	18.000	0.660	1010.47	1452.3	518.3	86.5	0.944	0.985	1.001	0.031	0.985	0.003	0.006	0.32	0.18
18	20.000	0.664	1015.28	1452.3	521.0	86.2	0.942	0.980	1.001	0.043	0.980	0.002	0.006	0.33	0.11
19	22.000	0.948	998.85	1451.0	511.8	85.5	0.935	0.988	1.001	0.035	0.988	0.002	0.005	0.31	0.12
20	24.000	0.948	998.65	1447.4	510.8	84.8	0.936	0.989	1.002	0.036	0.989	0.002	0.006	0.33	0.11

TEST PART MPX10-4 ALPHA KING YF ZT RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL
 SC-484 41 3.001 0.00 0.00 1-702 2-2-77 4T

POINT	XT	M	YF	PT	YF	0	YF	ML	VME/VW	DTL/DT	CPL	UT/VW	V7/VW	WT/VW	AATL	SMIL
22	-6.000	0.844	907.32	1450.7	511.0	95.4	95.4	0.934	0.908	1.002	0.026	0.988	0.003	0.007	0.40	0.19
23	-4.000	0.881	901.59	1444.7	512.0	95.2	95.2	0.938	0.908	1.001	0.026	0.988	0.003	0.007	0.38	0.17
24	-2.000	0.944	899.20	1447.9	510.9	95.4	95.4	0.937	0.900	1.001	0.022	0.990	0.003	0.007	0.38	0.17
25	0.000	0.945	895.44	1449.3	508.5	95.2	95.2	0.936	0.902	1.001	0.018	0.992	0.003	0.006	0.37	0.17
26	2.000	0.948	896.44	1447.0	508.0	95.6	95.6	0.935	0.901	1.002	0.020	0.991	0.003	0.006	0.35	0.18
27	4.000	0.947	897.34	1449.8	510.7	95.1	95.1	0.937	0.901	1.001	0.019	0.991	0.003	0.006	0.35	0.16
28	6.000	0.948	899.40	1449.1	511.6	95.2	95.2	0.937	0.900	1.001	0.023	0.990	0.003	0.006	0.33	0.15
29	8.000	0.950	900.32	1446.0	511.0	95.2	95.2	0.937	0.900	1.002	0.025	0.989	0.003	0.006	0.32	0.15
30	10.000	0.954	906.64	1449.7	515.4	95.0	95.0	0.941	0.906	1.000	0.027	0.986	0.003	0.006	0.34	0.18
31	12.000	0.953	903.51	1453.2	515.2	95.4	95.4	0.940	0.900	1.001	0.026	0.986	0.003	0.006	0.34	0.18
32	14.000	0.954	904.31	1447.6	514.2	95.4	95.4	0.940	0.907	1.002	0.030	0.987	0.003	0.006	0.34	0.15
33	16.000	0.957	907.38	1446.3	514.6	95.0	95.0	0.940	0.905	1.001	0.032	0.985	0.002	0.006	0.32	0.12
34	18.000	0.951	911.14	1449.9	519.0	95.0	95.0	0.943	0.904	1.001	0.033	0.984	0.002	0.006	0.35	0.13
35	20.000	0.957	907.20	1454.3	519.4	95.9	95.9	0.942	0.906	1.001	0.028	0.986	0.003	0.006	0.37	0.18
36	22.000	0.958	908.04	1447.1	515.5	95.5	95.5	0.941	0.905	1.003	0.036	0.985	0.002	0.006	0.35	0.12
37	24.000	0.964	917.72	1445.6	517.6	95.4	95.4	0.942	0.901	1.001	0.039	0.981	0.002	0.006	0.34	0.14

TEST PART		REF ID	DATE	SUN SURVEY		DATE		AEDC PROPELLANT WIND TUNNEL		TRANSONIC 42				
TC-484	41	2.007	14.14	0.00	1.703	2-3-77	2-3-77	VT/VN	WT/VN	AAITL	AAITL			
POINT	ST	W	VM	PT	TT	ML	VML/VN	PTL/ST	CPL	UT/VN	VT/VN	WT/VN	AAITL	AAITL
36	-2.000	0.035	984.34	1448.3	510.0	85.4	0.907	1.004	0.075	0.965	0.003	0.007	0.39	0.30
40	-2.000	0.045	992.69	1448.1	509.2	85.1	0.914	1.001	0.021	0.990	0.002	0.003	0.19	0.13
41	-2.000	0.047	997.43	1447.6	509.9	85.4	0.935	1.001	0.022	0.990	0.002	0.003	0.16	0.11
42	0.000	0.045	996.12	1450.3	510.1	85.2	0.934	1.001	0.021	0.990	0.002	0.003	0.17	0.11
43	2.000	0.045	996.06	1446.9	508.7	85.6	0.934	1.001	0.021	0.991	0.002	0.003	0.15	0.11
44	4.000	0.049	1000.59	1448.8	511.7	86.0	0.937	1.001	0.023	0.989	0.002	0.003	0.15	0.11
45	6.000	0.040	1001.41	1452.0	513.3	86.3	0.938	1.002	0.024	0.990	0.002	0.003	0.16	0.11
46	8.000	0.040	1001.07	1448.3	512.0	85.8	0.937	1.002	0.027	0.988	0.002	0.002	0.14	0.10
47	10.000	0.054	1004.62	1446.9	513.5	85.6	0.939	1.001	0.028	0.987	0.001	0.002	0.13	0.09
48	12.000	0.053	1002.97	1448.7	513.3	85.5	0.939	1.001	0.026	0.988	0.002	0.002	0.13	0.10
49	14.000	0.054	1003.95	1449.4	514.1	85.4	0.941	1.002	0.026	0.988	0.002	0.002	0.14	0.11
50	16.000	0.059	1008.93	1448.3	516.5	85.4	0.943	1.001	0.033	0.984	0.002	0.003	0.16	0.18
51	18.000	0.061	1010.34	1450.3	517.5	85.7	0.943	1.001	0.033	0.985	0.002	0.002	0.13	0.09
52	20.000	0.056	1005.98	1450.8	515.6	85.5	0.938	1.001	0.034	0.984	0.002	0.002	0.14	0.10
53	22.000	0.065	1014.41	1446.9	518.9	85.6	0.944	1.002	0.041	0.981	0.002	0.002	0.14	0.10
54	24.000	0.069	1017.84	1447.6	521.1	85.4	0.961	1.001	0.037	0.992	0.002	0.002	0.14	0.12

TEST PART PERIOD-6 ALPHA WING XT ZF RUN SURVEY DATE AEDC PROPUSSION WIND TUNNEL
 TC-484 40 2 sec 000 WORK 14.00 0.00 1.0 1 2-3-77 TRANSONIC 42

POINT	YT	Y	W	WV	PT	0	TT	VL	VM/V4	PTL/PT	CPL	UT/V4	VT/V4	WT/V4	AATL	SWTL
23	14.000	0.549	1002.16	1455.5	513.7	0	86.5	0.939	0.991	1.003	0.072	0.991	0.002	0.005	0.30	0.11
25	12.000	0.649	1001.75	1455.6	514.3	0	87.6	0.937	0.990	1.004	0.028	0.990	0.001	-0.001	-0.06	0.05
26	10.000	0.650	1002.79	1451.9	513.4	0	87.3	0.938	0.989	1.002	0.074	0.989	0.000	0.000	0.02	0.00
27	8.000	0.654	1005.94	1458.4	517.4	0	88.4	0.940	0.988	1.001	0.026	0.988	0.001	-0.001	-0.03	0.04
28	6.000	0.655	1005.01	1455.8	517.1	0	88.4	0.940	0.986	1.002	0.030	0.986	0.003	-0.001	-0.08	0.18
29	4.000	0.655	1007.40	1456.4	517.3	0	87.9	0.939	0.984	1.001	0.029	0.984	0.003	0.000	0.02	0.15
30	2.000	0.654	1006.44	1454.7	516.3	0	87.7	0.939	0.987	1.002	0.029	0.987	0.003	0.003	0.16	0.20
31	0.000	0.652	1004.41	1453.8	514.6	0	87.6	0.938	0.987	1.001	0.027	0.987	0.003	0.006	0.13	0.17
32	-2.000	0.653	1005.28	1457.4	514.6	0	87.9	0.938	0.987	1.001	0.027	0.987	0.001	0.002	0.13	0.07
33	-4.000	0.654	1006.81	1453.6	516.7	0	87.4	0.940	0.987	1.001	0.026	0.987	0.001	0.001	0.08	0.07
34	-6.000	0.650	1007.80	1456.7	514.9	0	87.5	0.938	0.989	1.002	0.025	0.989	0.001	0.006	0.23	0.06
35	-8.000	0.649	1007.48	1451.3	512.5	0	87.2	0.936	0.988	1.002	0.026	0.988	0.002	0.005	0.27	0.09
36	-10.000	0.640	1005.14	1455.5	514.3	0	87.2	0.938	0.980	1.001	0.022	0.980	0.002	0.005	0.31	0.13
37	-12.000	0.625	1000.79	1450.1	513.7	0	87.0	0.936	0.949	1.001	0.024	0.949	0.003	0.005	0.21	0.17
38	-14.000	0.648	1000.08	1453.1	512.7	0	86.4	0.937	0.990	1.001	0.022	0.990	0.001	0.004	0.21	0.08

TEST PART REX10-6 A/F 3.002 DATE 2-2-77 AERC PROPLUSTON WIND TUNNEL
 20-484 43 3.002 SUN SURVEY 1-701 TRANSOMIC 45

POINT	XT	Y	WM	WING	YT	ST	ML	VHL/VH	PFL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	SAFL
12	-6.000	0.000	1043.81	1426.5	426.5	0	0.940	0.985	1.001	0.032	0.985	0.003	0.007	0.39	0.17
13	-4.000	0.000	1043.34	1424.0	525.0	0	0.940	0.985	1.001	0.032	0.985	0.003	0.007	0.40	0.17
14	-2.000	0.000	1042.54	1427.5	526.0	0	0.944	0.988	1.001	0.025	0.988	0.003	0.007	0.41	0.18
15	0.000	0.000	1040.45	1426.1	524.1	0	0.939	0.987	1.002	0.029	0.987	0.003	0.007	0.40	0.18
16	2.000	0.000	1041.63	1423.2	524.2	0	0.943	0.989	1.001	0.025	0.988	0.003	0.006	0.38	0.18
17	4.000	0.000	1042.14	1423.9	525.0	0	0.944	0.990	1.001	0.020	0.990	0.003	0.006	0.35	0.19
18	6.000	0.000	1042.42	1424.8	526.1	0	0.943	0.988	1.002	0.026	0.988	0.003	0.006	0.33	0.19
19	8.000	0.000	1044.76	1429.6	528.2	0	0.943	0.987	1.001	0.028	0.986	0.003	0.006	0.32	0.17
20	10.000	0.000	1045.22	1431.3	529.4	0	0.944	0.987	1.002	0.030	0.986	0.003	0.006	0.33	0.18
21	12.000	0.000	1047.60	1423.0	475.3	0	0.938	0.983	1.002	0.037	0.983	0.003	0.006	0.32	0.18
22	14.000	0.000	1048.41	1426.1	529.3	0	0.946	0.985	1.000	0.031	0.985	0.003	0.005	0.31	0.18
23	16.000	0.000	1051.35	1426.8	531.1	0	0.942	0.978	1.002	0.046	0.978	0.003	0.006	0.33	0.16
24	18.000	0.000	1051.90	1424.3	530.2	0	0.943	0.979	1.001	0.043	0.979	0.002	0.006	0.35	0.14
25	20.000	0.000	1053.14	1427.2	532.1	0	0.946	0.980	1.001	0.041	0.980	0.003	0.006	0.35	0.15
26	22.000	0.000	1046.73	1425.4	529.7	0	0.944	0.982	1.002	0.039	0.982	0.003	0.006	0.37	0.15
27	24.000	0.000	1047.21	1424.2	527.9	0	0.942	0.983	1.001	0.036	0.983	0.002	0.006	0.38	0.14

TEST		PART		REF		ALFA		WING		YT		NON SURVEY		DATE		AEC PROPULSION WIND TUNNEL					
TC-484		43		2.909		0.000		NOVE		0.00		1-702		2-2-77		TRANSONIC CT					
POINT	YT	W	VU	PT	C	YT	PL	VPL/VN	PPL/PT	CPL	UT/VN	VT/VN	MT/VN	AATL	SMTL						
28	-6.000	1.000	1045.01	1428.3	526.0	36.0	0.978	0.983	1.002	0.037	0.983	0.003	0.007	0.30	0.10						
30	-4.000	0.998	1043.89	1430.3	524.1	46.3	0.983	0.989	1.001	0.029	0.989	0.003	0.007	0.30	0.20						
31	-2.000	0.998	1043.46	1430.4	526.0	46.1	0.981	0.986	1.001	0.030	0.986	0.003	0.006	0.37	0.17						
32	0.000	0.997	1043.03	1428.1	526.9	46.1	0.982	0.987	1.001	0.027	0.987	0.003	0.007	0.30	0.10						
33	2.000	0.998	1043.47	1429.1	527.6	46.0	0.983	0.988	1.002	0.027	0.988	0.003	0.006	0.37	0.20						
34	4.000	0.998	1043.41	1429.5	527.0	45.8	0.981	0.986	1.002	0.031	0.986	0.003	0.006	0.38	0.17						
35	6.000	0.998	1042.45	1428.5	525.1	45.4	0.980	0.983	1.002	0.032	0.983	0.003	0.006	0.38	0.17						
36	8.000	0.999	1043.36	1428.4	526.1	45.3	0.982	0.986	1.002	0.030	0.986	0.003	0.006	0.34	0.10						
37	10.000	1.000	1044.82	1428.1	527.0	45.5	0.982	0.985	1.002	0.033	0.985	0.003	0.006	0.34	0.10						
38	12.000	1.004	1049.58	1428.7	530.0	41.8	0.983	0.983	1.001	0.035	0.983	0.003	0.006	0.35	0.17						
39	14.000	1.004	1049.72	1428.9	530.0	41.8	0.983	0.982	1.001	0.037	0.982	0.003	0.006	0.35	0.17						
40	16.000	1.007	1051.84	1429.7	531.7	46.6	0.981	0.979	1.001	0.044	0.979	0.003	0.006	0.30	0.10						
41	18.000	1.008	1049.65	1428.7	530.5	46.1	0.982	0.981	1.002	0.041	0.981	0.003	0.006	0.30	0.17						
42	20.000	1.005	1049.72	1428.4	529.7	46.1	0.982	0.981	1.002	0.041	0.981	0.003	0.007	0.30	0.17						
43	22.000	1.004	1049.16	1429.3	530.4	46.4	0.984	0.984	1.001	0.035	0.984	0.003	0.006	0.37	0.10						
44	24.000	1.001	1046.06	1429.8	529.4	46.3	0.982	0.984	1.002	0.035	0.984	0.003	0.006	0.37	0.10						

TEST	PAR	APPROX	WIND	WT	ST	HOW	DATE	AEDC	PROPULSION	WIND	TUNNEL
TC-464	43	3,000	WIND	WT	ST	HOW	2-2-77	TRANSONIC	47		
			WIND	WT	ST	HOW	1-703				
DOUST	XT	0.996	1426.4	327.9	0	WT	0.977	0.982	0.003	0.19	0.19
46	-4.000	0.996	1431.5	326.0	0	WT	0.982	0.986	0.003	0.19	0.19
47	-4.000	0.997	1428.2	326.9	0	WT	0.981	0.986	0.003	0.19	0.19
48	-2.000	0.997	1428.2	326.9	0	WT	0.981	0.986	0.003	0.19	0.19
49	0.000	0.996	1428.4	327.6	0	WT	0.981	0.986	0.003	0.19	0.19
50	2.000	0.996	1430.2	328.3	0	WT	0.985	0.988	0.003	0.19	0.19
51	4.000	0.997	1429.1	327.1	0	WT	0.983	0.989	0.003	0.14	0.14
52	6.000	0.998	1428.0	327.1	0	WT	0.980	0.985	0.003	0.13	0.13
53	8.000	0.998	1428.4	328.1	0	WT	0.980	0.986	0.002	0.13	0.13
54	10.000	1.000	1429.0	328.5	0	WT	0.982	0.985	0.003	0.17	0.18
55	12.000	1.002	1429.8	329.4	0	WT	0.981	0.982	0.002	0.13	0.14
56	14.000	1.003	1427.6	329.3	0	WT	0.982	0.982	0.003	0.13	0.17
57	16.000	1.004	1427.2	330.5	0	WT	0.983	0.981	0.001	0.02	0.16
58	18.000	1.006	1429.0	332.2	0	WT	0.985	0.981	0.001	0.03	0.16
59	20.000	1.008	1426.1	330.9	0	WT	0.984	0.980	0.003	0.03	0.16
60	22.000	1.011	1426.7	333.3	0	WT	0.986	0.980	0.003	0.03	0.16
61	24.000	1.015	1426.6	333.2	0	WT	0.985	0.979	0.002	0.03	0.14

TEST PART		PRX10-6	ALFA	WING	WT	2T	PIV SURVEY		DATE		AEDC PROPELLANT WIND TUNNEL				
JC-484		49	3.005	0.000	14.00	0.00	1.0	1.0	2-2-79	TRANSONIC 48					
POINT	YT	V	VU	BT	Q	TT	WL	WVL/V4	PFL/BT	CPL	UT/V4	VT/V4	WT/V4	AATL	ENTL
21	14.000	0.000	1043.34	1431.5	528.7	85.0	0.003	0.987	0.997	0.021	0.987	0.002	0.006	0.33	0.12
22	12.000	0.000	1042.67	1425.7	525.7	85.5	0.000	0.986	1.004	0.034	0.986	0.001	-0.001	-0.04	0.06
23	10.000	0.000	1043.64	1425.0	526.8	85.3	0.001	0.985	1.002	0.033	0.985	0.000	0.001	0.06	0.02
24	8.000	0.000	1044.09	1427.1	527.8	85.4	0.003	0.986	1.001	0.029	0.986	0.001	0.000	0.01	0.08
25	6.000	0.000	1042.69	1425.0	526.0	85.2	0.000	0.985	1.002	0.033	0.985	0.003	-0.001	-0.06	0.10
26	4.000	0.001	1045.10	1425.8	527.5	85.3	0.004	0.986	1.001	0.030	0.986	0.003	0.001	0.08	0.19
27	2.000	0.000	1044.54	1427.2	527.5	85.7	0.001	0.985	1.001	0.032	0.985	0.004	0.003	0.20	0.21
28	0.000	0.000	1044.42	1428.1	527.9	85.6	0.003	0.986	1.002	0.030	0.986	0.003	0.006	0.34	0.18
29	-2.000	0.000	1043.77	1426.1	526.9	85.4	0.001	0.985	1.002	0.032	0.985	0.001	0.002	0.14	0.08
30	-4.000	0.000	1043.07	1426.1	527.1	85.2	0.002	0.986	1.000	0.030	0.986	0.002	0.002	0.09	0.11
31	-6.000	0.000	1043.80	1426.7	527.3	85.0	0.003	0.986	1.001	0.029	0.986	0.001	0.006	0.31	0.08
32	-8.000	0.000	1044.23	1426.4	527.3	85.3	0.003	0.986	1.001	0.028	0.986	0.002	0.005	0.29	0.11
33	-10.000	0.000	1043.14	1425.7	526.5	85.3	0.002	0.986	1.002	0.030	0.986	0.002	0.003	0.30	0.18
34	-12.000	0.000	1043.11	1427.1	526.9	85.4	0.002	0.987	1.000	0.027	0.987	0.003	0.004	0.22	0.18
35	-14.000	0.000	1042.71	1427.1	526.7	85.4	0.002	0.987	1.002	0.029	0.987	0.001	0.004	0.23	0.08

TEST PART 2X10-6 SPS WING YR 2F RUN SURVEY DATE AEDC PROPELLANT WIND TUNNEL
 JC-404 45 3.006 0000 NCWE 0.00 -14.14 1-701 2-3-77 TRANSDUC 42

POINT	Yr	W	Vr	PT	Q	ST	PL	VHL/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	SMTL
5	-0.000	1.024	1062.07	1448.2	543.0	95.3	1.014	0.976	1.002	0.050	0.976	0.002	0.007	0.42	0.09
6	-4.000	1.024	1076.70	1449.0	546.0	95.3	0.997	0.977	1.000	0.046	0.977	0.002	0.007	0.42	0.09
7	-2.000	1.020	1072.03	1455.4	547.1	95.4	0.991	0.976	1.001	0.049	0.976	0.002	0.006	0.38	0.10
8	0.000	1.021	1073.14	1450.0	545.0	95.5	0.992	0.976	1.002	0.052	0.976	0.002	0.006	0.34	0.10
9	2.000	1.014	1071.05	1451.6	545.2	95.3	0.983	0.978	1.000	0.043	0.978	0.002	0.006	0.35	0.10
10	4.000	1.014	1067.27	1451.4	544.0	95.4	0.984	0.983	1.000	0.034	0.983	0.002	0.006	0.38	0.10
11	6.000	1.018	1066.77	1451.7	544.5	95.6	0.981	0.978	1.001	0.045	0.978	0.002	0.006	0.36	0.10
12	8.000	1.024	1072.07	1451.7	547.4	95.5	0.989	0.979	1.001	0.043	0.979	0.001	0.005	0.31	0.09
13	10.000	1.032	1082.06	1451.3	550.5	95.2	1.002	0.976	1.001	0.049	0.976	0.001	0.006	0.34	0.09
14	12.000	1.041	1086.12	1449.2	553.7	95.4	1.012	0.977	1.002	0.049	0.977	0.001	0.006	0.33	0.09
15	14.000	1.037	1086.72	1452.2	552.0	95.4	1.011	0.979	1.000	0.042	0.979	0.002	0.006	0.37	0.09
16	16.000	1.043	1081.91	1453.4	555.9	95.3	1.007	0.971	1.000	0.050	0.971	0.001	0.006	0.37	0.09
17	18.000	1.051	1088.65	1451.4	559.0	95.6	1.026	0.979	1.001	0.044	0.979	0.002	0.006	0.36	0.09
18	20.000	1.040	1089.03	1449.4	552.0	95.7	1.001	0.969	1.000	0.062	0.969	0.002	0.006	0.36	0.10
19	22.000	1.033	1082.98	1455.1	552.1	95.7	1.004	0.977	1.001	0.047	0.977	0.001	0.005	0.31	0.08
20	24.000	1.027	1077.40	1453.7	549.1	95.5	0.993	0.973	1.000	0.055	0.973	0.001	0.006	0.33	0.07

TEST PLOT 20X10-4 ALFA WING YP ZT SURVEY DATE AEDC PROPELLION WIND TUNNEL
 TC-404 45 3.003 0.000 0.00 0.00 1-702 2-2-77 TRANSONIC 45

POINT	XT	W	WU	PT	Q	TT	WL	WVL/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	ARTL	SMTL
22	-6.000	1.024	1076.00	1453.4	947.9	95.4	0.997	0.979	0.999	0.041	0.979	0.002	0.007	0.41	0.10
23	-4.000	1.020	1071.08	1452.1	945.6	95.6	0.998	0.974	1.002	0.053	0.974	0.003	0.007	0.38	0.20
24	-2.000	1.024	1075.82	1452.7	947.9	95.7	0.998	0.970	1.001	0.080	0.970	0.002	0.006	0.36	0.10
25	0.000	1.022	1073.78	1451.6	946.3	95.6	0.990	0.974	1.000	0.093	0.974	0.002	0.005	0.32	0.06
26	2.000	1.021	1072.77	1456.7	947.8	95.7	0.994	0.978	1.001	0.045	0.978	0.002	0.006	0.33	0.12
27	4.000	1.027	1077.56	1451.3	948.3	95.3	0.996	0.975	1.001	0.052	0.975	0.002	0.005	0.32	0.12
28	6.000	1.031	1081.72	1447.1	948.5	95.1	1.007	0.981	1.002	0.041	0.981	0.002	0.005	0.30	0.18
29	8.000	1.028	1078.95	1450.0	948.4	95.4	1.006	0.982	1.001	0.037	0.982	0.002	0.006	0.32	0.13
30	10.000	1.028	1078.64	1452.7	948.2	95.6	1.007	0.983	1.001	0.035	0.983	0.002	0.005	0.30	0.09
31	12.000	1.032	1082.14	1451.3	949.5	95.2	1.001	0.975	1.001	0.053	0.975	0.002	0.006	0.28	0.11
32	14.000	1.033	1083.43	1450.9	950.8	95.6	1.000	0.973	1.001	0.055	0.973	0.002	0.005	0.31	0.12
33	16.000	1.031	1081.28	1451.3	950.1	95.4	0.995	0.971	1.001	0.060	0.971	0.002	0.005	0.32	0.11
34	18.000	1.033	1083.04	1450.9	949.8	95.2	0.997	0.971	1.002	0.061	0.971	0.002	0.005	0.32	0.12
35	20.000	1.044	1092.07	1448.2	954.0	95.1	1.007	0.971	1.002	0.061	0.971	0.002	0.006	0.34	0.11
36	22.000	1.048	1096.30	1449.8	956.3	95.7	1.014	0.973	1.002	0.057	0.973	0.001	0.006	0.34	0.07
37	24.000	1.024	1075.57	1458.5	948.5	96.1	0.996	0.978	1.001	0.046	0.978	0.001	0.006	0.36	0.08

TEST 9894 8810-6 ALPHA WING YF ZT RUN SURVEY DATE AEDC PROPUSSION WIND TUNNEL
 MC-884 49 3.002 0000 WQVF 14.14 0.00 1-703 20 2-97 TRANSONIC 47

POINT	XT	P	VU	PI	D	TT	WL	VUL/VU	PTL/PT	CPL	UT/VU	VT/VU	WT/VU	AATL	SWTL
36	-6.000	1.022	1073.33	1453.8	547.1	95.4	1.006	0.986	0.999	0.028	0.986	0.002	0.006	0.35	0.11
38	-4.000	1.024	1075.23	1450.8	547.1	95.3	0.997	0.970	1.002	0.043	0.970	0.001	0.002	0.14	0.08
40	-2.000	1.025	1075.70	1449.8	546.8	95.3	0.999	0.971	1.001	0.060	0.971	0.001	0.003	0.16	0.07
42	0.000	1.024	1075.03	1451.6	547.4	95.7	0.995	0.976	1.002	0.051	0.976	0.001	0.003	0.16	0.08
43	2.000	1.024	1075.26	1452.0	547.4	95.4	0.994	0.975	1.002	0.052	0.975	0.002	0.002	0.14	0.09
44	4.000	1.026	1076.70	1453.3	548.6	95.3	0.997	0.976	1.001	0.049	0.976	0.001	0.002	0.11	0.08
45	6.000	1.029	1079.82	1450.0	548.6	95.8	0.996	0.975	1.002	0.054	0.975	0.001	0.002	0.13	0.06
46	8.000	1.034	1087.00	1452.2	549.2	95.5	1.006	0.975	1.001	0.052	0.975	0.001	0.002	0.14	0.04
47	10.000	1.044	1092.78	1453.2	556.1	95.6	1.016	0.978	1.000	0.045	0.978	0.001	0.002	0.13	0.06
48	12.000	1.047	1095.03	1451.8	556.7	95.2	1.020	0.979	1.002	0.045	0.978	0.000	0.002	0.11	0.02
49	14.000	1.045	1093.76	1447.2	554.2	96.0	1.023	0.983	1.002	0.036	0.983	0.001	0.002	0.12	0.04
50	16.000	1.021	1073.44	1454.2	549.8	96.2	0.998	0.981	1.000	0.038	0.981	0.001	0.002	0.13	0.06
51	18.000	1.017	1049.86	1458.7	547.0	95.9	0.996	0.974	1.000	0.052	0.974	0.002	0.003	0.16	0.14
52	20.000	1.054	1101.44	1452.5	559.7	95.8	1.022	0.975	1.003	0.054	0.975	0.000	0.002	0.12	0.02
53	22.000	1.050	1098.84	1450.0	557.3	96.2	1.014	0.971	1.000	0.058	0.971	0.001	0.002	0.14	0.07
54	24.000	1.019	1071.89	1457.5	547.4	96.3	0.991	0.977	1.001	0.048	0.977	0.002	0.003	0.17	0.13

TEST PRT RFX10-6 ALPHA MING XT 2P PINV SURVEY DATE AFDC PROPLUSION WIND TUNNEL
 TC-484 44 2.993 0.000 14.00 0.00 1-1 2-2-77 TRANSONIC 4T

POINT	YT	W	VU	PT	0	TP	YL	VNL/VN	FTL/PT	CPL	UT/VN	VT/VN	WT/VN	AATL	SWTL
22	14.000	1.023	1071.09	1446.0	544.9	94.4	0.994	0.976	1.004	0.054	0.976	0.001	0.004	0.24	0.05
24	12.000	1.024	1075.52	1452.1	547.8	94.4	1.001	0.980	0.999	0.039	0.980	-0.001	-0.000	-0.03	-0.04
25	10.000	1.023	1074.12	1448.2	545.5	95.1	0.999	0.972	1.002	0.038	0.972	-0.001	0.001	0.05	-0.04
26	8.000	1.024	1078.51	1449.3	548.3	95.1	0.993	0.971	1.001	0.039	0.971	-0.000	-0.001	-0.06	-0.02
27	6.000	1.020	1079.72	1451.4	549.6	94.4	0.993	0.972	1.002	0.039	0.972	0.002	-0.001	-0.07	0.10
28	4.000	1.024	1075.38	1448.9	546.8	95.1	0.990	0.972	1.002	0.030	0.972	0.001	0.001	0.03	0.08
29	2.000	1.024	1075.48	1450.1	547.1	95.0	0.991	0.972	1.001	0.037	0.972	0.002	0.003	0.16	0.14
30	0.000	1.024	1075.94	1450.9	547.4	95.3	0.993	0.971	1.001	0.061	0.971	0.002	0.005	0.31	0.12
31	-2.000	1.024	1074.38	1451.2	547.0	94.6	0.999	0.971	1.002	0.060	0.971	0.000	0.002	0.10	0.02
32	-4.000	1.022	1073.18	1449.4	544.2	94.6	0.995	0.970	1.002	0.064	0.970	0.000	0.001	0.09	0.02
33	-6.000	1.022	1073.07	1449.8	545.5	95.3	0.999	0.973	1.003	0.058	0.973	-0.000	0.006	0.32	-0.09
34	-8.000	1.024	1075.72	1451.9	548.0	94.4	0.998	0.969	1.001	0.063	0.969	0.001	0.005	0.28	0.05
35	-10.000	1.024	1075.64	1443.0	544.7	95.2	0.987	0.969	1.003	0.066	0.969	0.001	0.005	0.29	0.05
36	-12.000	1.024	1078.57	1453.1	549.6	95.0	0.997	0.975	1.000	0.050	0.975	0.002	0.004	0.21	0.13
37	-14.000	1.024	1074.56	1448.9	546.0	95.2	0.990	0.972	1.002	0.059	0.972	0.000	0.004	0.21	0.02

TEST PART MPX10-A ALPA WING XT TT ROW SURVEY DATE AEDC PROPELLION WIND TUNNEL
 TC-484 44 3.004 0000 WOE 14.00 0.00 1- 1 2- 2-77 TRANSONIC 42

POINT	XT	M	VV	PT	Q	TT	PL	YML/VN	PTL/PT	CPD	UT/VN	VT/VN	MT/VN	ABTL	SWTL
6	14.000	1.024	1074.20	1448.5	546.9	93.7	0.995	0.975	1.000	0.050	0.975	0.001	0.004	0.26	0.07
7	12.000	1.020	1077.04	1449.5	548.3	94.2	0.996	0.974	0.999	0.051	0.974	0.003	0.002	0.11	0.17
8	10.000	1.027	1076.54	1448.7	547.6	93.7	0.995	0.974	1.001	0.054	0.974	0.005	-0.001	-0.07	0.20
9	8.000	1.024	1074.70	1443.5	545.1	93.9	0.990	0.970	1.001	0.051	0.970	0.005	-0.001	-0.05	0.29
10	6.000	1.024	1074.20	1444.5	545.9	94.2	0.992	0.972	1.001	0.057	0.972	0.004	-0.002	-0.14	0.26
11	4.000	1.028	1075.44	1449.4	547.2	93.9	0.991	0.971	1.002	0.060	0.971	0.005	-0.002	-0.09	0.27
12	2.000	1.023	1073.04	1447.0	545.1	94.0	0.986	0.970	1.001	0.062	0.970	0.002	0.002	0.12	0.19
13	0.000	1.021	1071.19	1445.1	543.6	93.7	0.987	0.972	1.002	0.059	0.972	0.002	0.005	0.31	0.10
14	-2.000	1.026	1076.20	1449.6	548.5	94.2	0.990	0.969	1.000	0.062	0.969	0.002	0.005	0.31	0.13
15	-4.000	1.026	1076.15	1448.1	546.7	94.6	0.988	0.969	1.001	0.063	0.969	0.002	0.005	0.32	0.13
16	-6.000	1.024	1074.65	1446.0	546.4	94.5	0.988	0.970	1.001	0.061	0.970	-0.000	0.005	0.31	-0.05
17	-8.000	1.023	1073.46	1445.6	544.7	94.5	0.988	0.972	1.001	0.059	0.972	-0.001	0.005	0.31	-0.05
18	-10.000	1.022	1071.97	1447.6	544.7	94.2	0.989	0.974	1.002	0.055	0.974	-0.000	0.005	0.30	-0.03
19	-12.000	1.021	1071.09	1448.0	544.5	94.1	0.988	0.974	1.001	0.055	0.974	-0.002	0.005	0.30	0.10
20	-14.000	1.023	1073.74	1446.9	544.1	94.0	0.986	0.970	1.002	0.063	0.970	0.001	0.005	0.33	0.09

TEST	DATE	PRIN-4	ALFA	WING	YC	ST	SWR	POWER	DATE	AEDC	PROPULSION	WIND	TUNNEL
TC-984	27	2,000	0.000	MMMP	0.00	0.00	1.707	2-2-77		TRANSONIC	45		
POWRT													
72	-6.000	1.049	1067.00	1445.0	544.9	95.0	1.035	0.990	0.048	0.007	0.40	0.07	0.07
73	-4.000	1.045	1064.08	1443.5	553.0	95.8	1.020	0.990	0.042	0.005	0.31	0.13	0.13
74	-2.000	1.051	1061.33	1447.7	553.5	96.1	1.016	0.974	0.032	0.006	0.35	0.08	0.08
75	0.000	1.047	1066.68	1446.5	554.5	96.3	1.018	0.977	0.001	0.006	0.37	0.07	0.07
76	2.000	1.057	1067.87	1443.2	554.6	95.5	1.023	0.970	0.061	0.006	0.34	0.06	0.06
77	4.000	1.057	1066.74	1445.2	556.1	96.8	1.022	0.976	0.040	0.006	0.34	0.08	0.08
78	6.000	1.057	1102.34	1446.5	558.9	97.9	1.026	0.974	0.044	0.005	0.32	0.11	0.11
79	8.000	1.057	1104.22	1446.7	558.0	97.7	1.034	0.982	0.038	0.005	0.32	0.16	0.16
80	10.000	1.055	1102.74	1443.3	554.6	96.0	1.027	0.978	0.035	0.005	0.31	0.10	0.10
81	12.000	1.057	1103.73	1448.7	559.2	95.0	1.034	0.983	0.035	0.005	0.29	0.12	0.12
82	14.000	1.067	1096.64	1447.0	556.8	96.6	1.031	0.983	0.034	0.005	0.30	0.11	0.11
83	16.000	1.067	1109.44	1446.0	560.7	95.9	1.042	0.984	0.033	0.006	0.32	0.11	0.11
84	18.000	1.057	1104.35	1444.8	557.8	96.3	1.021	0.971	0.000	0.002	0.35	0.12	0.12
85	20.000	1.068	1114.17	1448.1	563.3	96.3	1.043	0.981	0.040	0.002	0.31	0.11	0.11
86	22.000	1.066	1104.45	1446.5	559.7	96.0	1.033	0.979	0.040	0.006	0.36	0.11	0.11
87	24.000	1.059	1105.34	1446.0	558.7	96.3	1.021	0.971	0.059	0.006	0.37	0.08	0.08

TEST	POINT	REFINED	SLIP	WIND	TT	ST	SNW	SUPPLY	DATE	AEDC PROPULSION WIND TUNNEL				
TC-464	47	2.097	0.000	14.14	1.203	0.00	1.203	1.203	2-2-57	UT/VN	VT/VN	WT/VN	ATL	STTL
	39	2.000	1.046	104.37	1445.3	553.9	95.9	1.035	0.991	0.991	0.003	0.003	0.14	0.15
	40	2.000	1.049	104.13	1445.5	554.0	95.9	1.019	0.977	0.977	0.001	0.002	0.14	0.03
	41	2.000	1.049	104.30	1445.8	554.6	95.4	1.017	0.975	0.975	0.001	0.002	0.14	0.04
	42	2.000	1.049	104.44	1445.8	554.7	95.7	1.016	0.973	0.973	0.001	0.003	0.18	0.03
	43	2.000	1.053	104.68	1446.1	555.6	95.6	1.022	0.976	0.976	0.001	0.003	0.18	0.07
	44	2.000	1.050	104.64	1446.6	555.3	96.0	1.021	0.977	0.977	0.002	0.002	0.14	0.10
	45	2.000	1.055	104.68	1446.6	556.0	95.9	1.023	0.977	0.977	0.001	0.003	0.15	0.08
	46	2.000	1.054	104.90	1446.4	557.5	96.0	1.026	0.978	0.978	0.001	0.003	0.15	0.06
	47	2.000	1.053	104.18	1446.1	556.7	95.5	1.037	0.980	0.980	0.001	0.002	0.14	0.07
	48	2.000	1.057	104.31	1446.3	557.1	95.9	1.036	0.984	0.984	0.001	0.002	0.12	0.07
	49	2.000	1.058	104.43	1446.3	557.2	95.6	1.036	0.978	0.978	0.001	0.002	0.11	0.08
	50	2.000	1.058	104.53	1446.6	557.3	95.7	1.036	0.983	0.983	0.001	0.002	0.12	0.08
	51	2.000	1.056	104.01	1445.9	557.4	95.8	1.033	0.982	0.982	0.002	0.003	0.13	0.02
	52	2.000	1.053	104.08	1446.6	556.2	95.1	1.022	0.975	0.975	0.001	0.002	0.13	0.05
	53	2.000	1.058	104.27	1447.1	559.1	96.1	1.039	0.977	0.977	0.001	0.002	0.14	0.05
	54	2.000	1.058	104.82	1445.8	557.5	96.4	1.032	0.974	0.974	0.001	0.003	0.13	0.08

TEST POINT 20X10-6 LPA WING YP 2P MIN SURVEY DATE AEDC PROPUSTION WIND TUNNEL
 TC-484 47 2.000 0.00 0.00 -14.16 1-701 2-3-77 TRANSONIC 45

POINT	XT	Y	VM	PT	Q	ST	WL	VM/L/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	ARTL	DTL
5	-2.000	1.057	1089.46	1438.0	553.4	95.6	1.023	0.977	1.001	0.047	0.977	0.001	0.007	0.40	0.07
6	-4.000	1.051	1089.90	1438.9	553.8	96.1	1.027	0.981	1.001	0.038	0.981	0.002	0.007	0.41	0.11
7	-7.000	1.044	1089.72	1438.7	553.6	96.5	1.015	0.975	1.001	0.041	0.975	0.002	0.007	0.40	0.08
8	0.000	1.040	1089.81	1438.6	553.5	95.9	1.000	0.974	1.001	0.055	0.974	0.001	0.007	0.39	0.06
9	2.000	1.044	1089.43	1438.1	553.4	96.0	1.017	0.978	1.000	0.044	0.978	0.002	0.006	0.35	0.09
10	4.000	1.051	1089.43	1438.1	553.4	96.0	1.027	0.981	1.000	0.038	0.981	0.002	0.005	0.32	0.09
11	6.000	1.050	1089.24	1437.9	553.2	96.0	1.021	0.978	1.002	0.047	0.978	0.002	0.005	0.30	0.09
12	8.000	1.052	1089.21	1437.9	553.2	96.2	1.032	0.982	1.000	0.037	0.982	0.001	0.005	0.29	0.07
13	10.000	1.052	1089.01	1437.2	553.8	96.1	1.036	0.985	1.001	0.032	0.985	0.002	0.006	0.32	0.10
14	12.000	1.051	1088.93	1437.1	553.3	96.1	1.017	0.974	1.000	0.052	0.974	0.001	0.006	0.34	0.07
15	14.000	1.042	1088.14	1437.7	540.7	96.0	1.037	0.981	1.001	0.040	0.981	0.002	0.006	0.34	0.09
16	16.000	1.074	1088.37	1437.7	543.9	96.1	1.042	0.976	1.000	0.049	0.976	0.001	0.006	0.36	0.08
17	18.000	1.059	1088.44	1437.4	543.2	96.0	1.043	0.982	1.000	0.016	0.982	0.002	0.006	0.37	0.09
18	20.000	1.056	1088.72	1437.7	543.4	96.3	1.024	0.975	1.002	0.053	0.975	0.001	0.006	0.37	0.07
19	22.000	1.059	1088.96	1437.9	553.1	96.3	1.032	0.980	1.001	0.042	0.980	0.001	0.007	0.40	0.17
20	24.000	1.054	1088.48	1436.3	553.1	96.1	1.024	0.977	1.001	0.048	0.977	0.001	0.006	0.38	0.08

TEST PART		ALPA		WPC		X7		SP		RUN SUPER		DATE		AEC PROPULSION WIND TUNNEL				
TC-484		46		3.095		14.00		9.00		J-1		20-3-77		TRANSONIC 47				
POINT	YT	W	VM	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT
22	10.000	1.048	1096.35	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0	1444.0
24	10.000	1.048	1096.17	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0	1445.0
25	10.000	1.048	1096.40	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5
26	6.000	1.050	1098.28	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7	1446.7
27	6.000	1.050	1098.28	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5	1446.5
28	6.000	1.048	1097.33	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2	1443.2
29	2.000	1.052	1100.35	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3	1446.3
30	0.000	1.053	1100.55	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0
31	-2.000	1.052	1100.20	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
32	-6.000	1.058	1097.60	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5	1443.5
33	-6.000	1.058	1097.84	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
34	-8.000	1.048	1096.27	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0	1447.0
35	-10.000	1.048	1096.34	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6	1445.6
36	-12.000	1.046	1096.83	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1	1445.1
37	-14.000	1.047	1095.23	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7	1445.7

TEST PART REX10-A ALPHA WING XT TT RMV SURVEY

IC-684 46 2.007 0.000 14.00 0.00 0.00 3-1

DATE 20-2-77

AEDC PROPULSION WIND TUNNEL TRANSONIC 42

POINT	ST	M	VM	PT	Q	TT	ML	VM/VN	PTL/PT	CPL	UT/VN	VT/VN	MT/VN	ATL	STL
4	14.000	1.048	1097.44	1444.2	554.6	95.0	1.020	0.977	1.002	0.049	0.977	0.001	0.004	0.23	0.03
7	12.000	1.032	1099.42	1444.8	554.9	95.0	1.022	0.977	1.000	0.047	0.977	0.003	0.002	0.12	0.18
8	10.000	1.033	1101.20	1449.0	558.1	96.0	1.028	0.980	0.999	0.039	0.980	0.004	-0.001	-0.05	0.28
9	9.000	1.052	1098.93	1448.4	557.4	96.0	1.024	0.980	1.000	0.041	0.980	0.005	-0.001	-0.04	0.27
10	8.000	1.050	1097.84	1445.0	545.1	95.0	1.023	0.979	1.000	0.042	0.979	0.004	-0.003	-0.18	0.28
11	7.000	1.048	1096.45	1444.4	544.3	94.0	1.027	0.983	1.002	0.036	0.983	0.005	-0.002	-0.10	0.27
12	6.000	1.047	1095.72	1445.1	544.2	95.0	1.024	0.982	1.002	0.039	0.982	0.002	0.002	0.09	0.14
13	5.000	1.044	1094.34	1444.3	543.3	95.0	1.024	0.983	1.002	0.037	0.983	0.003	0.005	0.27	0.11
14	4.000	1.044	1092.70	1443.2	542.0	96.0	1.019	0.980	1.001	0.041	0.980	0.003	0.006	0.23	0.19
15	3.000	1.045	1107.54	1446.0	557.4	96.3	1.031	0.981	1.001	0.039	0.981	0.002	0.005	0.31	0.10
16	2.000	1.040	1097.86	1445.7	555.3	96.0	1.025	0.980	1.002	0.042	0.980	-0.000	0.003	0.34	-0.08
17	1.000	1.045	1094.45	1444.4	543.3	95.0	1.020	0.978	1.001	0.046	0.978	-0.001	0.006	0.34	-0.08
18	0.000	1.044	1094.37	1444.2	543.9	96.2	1.018	0.976	1.002	0.047	0.976	0.000	0.006	0.35	0.11
19	-1.000	1.044	1094.93	1446.3	554.2	96.0	1.015	0.976	1.002	0.051	0.975	0.002	0.006	0.35	0.11
20	-2.000	1.044	1096.38	1445.8	553.8	96.0	1.012	0.973	1.001	0.055	0.973	0.002	0.006	0.36	0.12

TEST TC-444	P1PT 85	APX10-6 2.005	ALPA -0.15	WING 49	Y 3.00	Z -2.00	RUN SURVEY		DATE 2- 2-77	AEDC POPULATION WIND TUNNEL TRANSONIC 40							
							1 3-	2 3-		UL/VH	VL/VH	PTL/PT	CPL	UL/VH	VL/VH	UL/VH	VL/VH
POINT	Y	M	WV	PT	0	TT	VL	VHL/VH	PTL/PT	CPL	UL/VH	VL/VH	UL/VH	VL/VH	AAL	SWL	
9	10.333	0.704	844.19	1527.7	447.4	77.9	0.799	1.001	1.003	0.001	0.009	0.010	-0.009	0.010	-0.39	0.34	
10	10.466	0.703	849.56	1526.1	447.2	78.0	0.802	0.999	1.002	0.005	0.009	0.010	-0.009	0.010	-0.31	0.30	
12	11.000	0.705	854.01	1528.5	447.7	78.0	0.801	1.004	1.001	-0.006	0.011	0.011	-0.011	0.011	-0.62	0.58	
13	11.333	0.702	858.17	1530.0	451.1	77.9	0.803	1.001	1.001	-0.001	0.011	0.011	-0.011	0.011	-0.74	0.63	
14	11.666	0.700	859.79	1529.3	449.2	77.9	0.802	1.003	1.002	-0.002	0.011	0.011	-0.011	0.011	-0.87	0.63	
15	12.000	0.693	859.01	1528.6	451.3	77.9	0.805	1.002	1.001	-0.001	0.011	0.011	-0.011	0.011	-0.97	0.60	
16	12.333	0.691	857.55	1528.5	449.6	77.8	0.807	1.007	1.001	-0.012	0.009	0.009	-0.010	0.009	-1.04	0.52	
17	12.666	0.691	854.70	1527.7	449.4	77.9	0.811	1.011	1.001	-0.020	0.008	0.008	-0.010	0.008	-1.09	0.47	
18	13.000	0.691	847.38	1529.4	450.4	78.0	0.815	1.015	1.000	-0.028	0.007	0.007	-0.010	0.007	-1.05	0.40	
19	13.333	0.691	847.44	1528.3	450.0	78.1	0.817	1.018	1.001	-0.033	0.005	0.005	-0.010	0.005	-1.01	0.30	
20	13.666	0.690	846.57	1528.1	449.6	78.1	0.822	1.024	1.001	-0.046	0.004	0.004	-0.010	0.004	-0.90	0.24	
21	14.000	0.690	846.77	1528.5	449.3	77.9	0.824	1.027	1.002	-0.050	0.004	0.004	-0.014	0.004	-0.78	0.21	
22	14.333	0.690	845.99	1527.5	449.0	77.9	0.828	1.031	1.002	-0.059	0.003	0.003	-0.011	0.003	-0.63	0.19	
23	14.666	0.691	844.40	1527.7	449.4	77.0	0.832	1.034	1.001	-0.067	0.002	0.002	-0.009	0.002	-0.48	0.13	
24	15.000	0.691	844.85	1527.5	449.4	77.0	0.832	1.035	1.001	-0.069	0.002	0.002	-0.005	0.002	-0.28	0.09	
25	15.333	0.691	847.50	1527.7	450.2	77.1	0.836	1.038	1.001	-0.075	0.002	0.002	-0.001	0.002	-0.04	0.00	
26	15.666	0.692	847.51	1531.6	451.2	78.1	0.836	1.039	1.001	-0.075	0.001	0.001	-0.004	0.001	-0.21	0.00	
27	16.000	0.704	844.51	1531.0	448.7	78.2	0.834	1.039	1.002	-0.074	0.002	0.002	-0.004	0.002	0.07	0.11	
28	16.333	0.705	844.23	1529.7	448.2	77.2	0.830	1.036	1.002	-0.069	0.002	0.002	-0.003	0.002	0.12	0.12	
29	16.666	0.697	849.19	1526.3	450.0	78.1	0.833	1.036	1.001	-0.066	0.002	0.002	-0.010	0.002	0.00	0.13	
30	17.000	0.690	844.11	1527.3	448.6	78.2	0.827	1.030	1.001	-0.050	0.003	0.003	-0.020	0.003	1.00	0.14	
31	17.333	0.700	844.08	1529.2	448.4	78.3	0.810	1.021	1.001	-0.040	0.003	0.003	-0.020	0.003	1.14	0.17	
32	17.666	0.690	844.35	1530.4	449.7	78.2	0.812	1.014	1.001	-0.025	0.004	0.004	-0.017	0.004	1.10	0.20	
33	18.000	0.691	856.34	1528.5	449.1	78.2	0.813	1.006	1.001	-0.008	0.004	0.004	-0.017	0.004	0.31	0.21	
34	18.333	0.694	853.11	1529.6	448.5	78.5	0.799	1.004	1.001	-0.006	0.004	0.004	-0.015	0.004	0.80	0.23	
35	18.666	0.692	848.74	1530.6	451.4	78.5	0.799	1.006	1.001	-0.008	0.004	0.004	-0.015	0.004	0.87	0.23	
36	19.000	0.694	851.71	1531.9	446.9	78.3	0.798	1.003	1.001	-0.004	0.004	0.004	-0.015	0.004	0.84	0.23	

TEST PAPT 0210-6 ALPI WING Y 2 3-1
IC-484 84 2,988 -0.15 46 3,000 -1.00 3-1

DATE 2-2-77
AEDC PROPELLION WIND TUNNEL
TRANSONIC 42

POINT	X	M	VP	PT	Q	TY	WL	VM/VW	DTL/PT	CPL	UL/VW	VL/VW	ML/VW	AL	SW
2	10.333	0.801	857.74	1528.4	450.1	78.4	0.767	0.995	1.001	0.012	0.995	0.012	-0.005	-0.30	0.76
3	10.466	0.801	857.88	1527.9	450.0	78.5	0.765	0.993	1.001	0.016	0.993	0.015	-0.007	-0.30	0.64
5	11.000	0.799	855.73	1531.6	449.6	78.4	0.793	0.993	1.001	0.015	0.993	0.018	-0.011	-0.44	1.03
6	11.333	0.800	856.80	1531.4	450.0	78.4	0.789	0.988	1.001	0.028	0.987	0.019	-0.017	-0.67	1.32
8	11.444	0.800	856.38	1529.4	449.4	78.6	0.794	0.994	1.001	0.016	0.993	0.021	-0.023	-1.31	1.18
9	12.000	0.802	856.64	1530.3	451.2	78.5	0.796	0.993	1.001	0.017	0.992	0.019	-0.028	-1.44	1.06
10	12.333	0.801	856.00	1529.5	450.4	78.7	0.802	1.001	1.001	-0.000	1.000	0.019	-0.032	-1.54	0.95
11	12.666	0.800	856.54	1529.1	450.7	78.8	0.809	1.010	1.000	-0.020	1.010	0.011	-0.033	-1.69	0.88
12	13.000	0.802	856.41	1530.9	451.1	78.7	0.816	1.018	1.001	-0.029	1.018	0.007	-0.032	-1.83	0.80
13	13.333	0.802	856.57	1531.0	451.3	78.7	0.823	1.023	1.001	-0.045	1.023	0.004	-0.030	-1.87	0.81
14	13.444	0.799	856.17	1532.4	449.9	78.8	0.829	1.033	1.001	-0.064	1.032	0.002	-0.028	-1.92	0.82
15	14.000	0.800	856.79	1532.0	450.2	78.8	0.834	1.038	1.002	-0.072	1.037	0.000	-0.021	-1.18	0.82
16	14.333	0.798	855.06	1532.3	449.1	78.8	0.837	1.043	1.001	-0.084	1.043	-0.000	-0.017	-0.92	-0.03
17	14.666	0.802	856.67	1531.6	452.9	78.8	0.846	1.045	1.001	-0.090	1.045	-0.001	-0.012	-0.67	-0.03
18	15.000	0.798	856.64	1533.9	449.2	78.8	0.838	1.044	1.001	-0.087	1.044	-0.001	-0.006	-0.36	-0.06
19	15.333	0.800	856.44	1529.8	449.3	78.8	0.848	1.053	1.002	-0.103	1.053	-0.001	-0.001	0.70	-0.03
20	15.666	0.800	857.04	1532.9	450.6	79.0	0.848	1.053	1.000	-0.106	1.053	-0.000	0.006	0.36	-0.04
21	16.000	0.800	857.42	1533.6	450.8	79.0	0.848	1.052	1.001	-0.102	1.052	-0.001	0.013	0.70	-0.03
22	16.333	0.798	854.74	1533.1	448.9	79.1	0.848	1.056	1.000	-0.111	1.055	-0.001	0.030	1.06	-0.03
23	16.666	0.793	854.30	1533.1	450.1	79.0	0.843	1.048	1.001	-0.096	1.048	-0.000	0.027	1.43	-0.01
24	17.000	0.800	857.16	1531.4	450.3	78.9	0.836	1.039	1.001	-0.077	1.039	-0.001	0.033	1.82	0.06
25	17.333	0.798	855.31	1532.1	449.2	78.8	0.823	1.027	1.001	-0.052	1.026	0.002	0.038	2.03	0.13
26	17.666	0.801	857.90	1530.8	450.5	79.1	0.809	1.009	1.001	-0.015	1.008	0.003	0.033	1.89	0.10
27	18.000	0.799	854.32	1532.7	449.9	79.1	0.795	0.995	1.001	0.013	0.994	0.004	0.026	1.51	0.21
28	18.333	0.799	855.64	1534.2	449.9	79.1	0.786	0.986	1.000	0.039	0.986	0.004	0.018	1.06	0.22
29	18.444	0.800	857.50	1532.6	450.8	79.1	0.785	0.983	1.001	0.036	0.983	0.004	0.013	0.77	0.20
30	19.000	0.802	858.62	1533.3	451.8	79.1	0.791	0.988	1.001	0.038	0.988	0.005	0.010	0.59	0.30

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TEST PART REX10-6 ALPHA WING Y Z RUN SURVEY
 TC-404 91 2.997 0.00 4.0 3.00 -2.00 3-1
 DATE 2-3-77 AEDC PROPULSION WIND TUNNEL
 TRANSONIC 47

POINT	X	Y	Z	PT	ML	VHL/VH	PTL/PT	CPL	UL/VH	VL/VH	ML/VH	AAL	SHL
6	10.333	0.850	909.86	1514.3	477.4	0.851	1.002	1.001	1.001	0.013	-0.009	-0.51	0.75
7	10.666	0.850	910.25	1514.9	478.0	0.850	1.000	0.002	1.000	0.014	-0.011	-0.62	0.79
8	11.000	0.851	911.00	1515.9	478.6	0.850	0.999	1.001	0.999	0.015	-0.013	-0.74	0.84
9	11.333	0.851	911.38	1516.2	479.0	0.849	0.998	1.001	0.998	0.015	-0.016	-0.91	0.84
10	11.666	0.852	911.73	1516.8	479.3	0.851	0.999	1.001	0.999	0.015	-0.018	-1.04	0.85
11	12.000	0.852	912.15	1515.6	479.2	0.853	1.001	1.001	1.001	0.014	-0.020	-1.17	0.82
12	12.333	0.852	912.52	1516.4	479.6	0.858	1.005	1.001	1.005	0.013	-0.022	-1.26	0.75
13	12.666	0.853	913.48	1516.4	480.3	0.861	1.008	1.001	1.008	0.012	-0.023	-1.31	0.67
14	13.000	0.854	913.99	1516.6	480.7	0.867	1.013	1.001	1.013	0.010	-0.023	-1.28	0.58
15	13.333	0.855	914.76	1516.6	481.2	0.871	1.017	1.001	1.017	0.009	-0.022	-1.22	0.51
16	13.666	0.851	911.40	1516.7	479.1	0.876	1.025	1.001	1.025	0.008	-0.020	-1.14	0.44
18	14.000	0.845	905.91	1515.3	475.0	0.872	1.027	1.002	1.027	0.007	-0.018	-0.98	0.37
19	14.333	0.848	907.94	1515.4	476.5	0.877	1.029	1.001	1.029	0.006	-0.015	-0.84	0.34
20	14.666	0.848	908.73	1514.7	476.7	0.882	1.034	1.001	1.034	0.006	-0.012	-0.68	0.32
21	15.000	0.850	909.96	1515.4	477.9	0.886	1.037	1.001	1.037	0.006	-0.009	-0.50	0.31
22	15.333	0.851	911.43	1516.3	479.0	0.890	1.039	1.001	1.039	0.006	-0.005	-0.27	0.32
23	15.666	0.854	913.51	1517.2	480.7	0.893	1.040	1.001	1.040	0.006	-0.003	-0.05	0.34
24	16.000	0.854	913.26	1515.6	480.1	0.894	1.041	1.001	1.041	0.007	0.003	0.19	0.39
25	16.333	0.855	914.54	1515.2	480.8	0.894	1.040	1.001	1.040	0.008	0.008	0.45	0.42
32	16.666	0.854	914.55	1516.1	480.9	0.891	1.037	1.002	1.037	0.008	0.013	0.72	0.46
45	17.000	0.853	912.16	1508.8	473.4	0.886	1.034	1.002	1.034	0.009	0.017	0.92	0.52
46	17.333	0.848	908.59	1522.2	478.0	0.872	1.024	1.001	1.024	0.010	0.017	0.97	0.57
47	17.666	0.849	908.99	1522.0	479.4	0.863	1.014	1.001	1.014	0.010	0.017	0.94	0.56
48	18.000	0.850	909.35	1515.6	477.7	0.854	1.005	1.002	1.005	0.010	0.014	0.82	0.57
49	18.333	0.853	912.87	1514.0	478.4	0.851	0.998	1.001	0.998	0.010	0.011	0.65	0.53
53	18.666	0.849	909.42	1517.4	478.0	0.844	0.995	1.000	0.995	0.010	0.008	0.48	0.56
54	19.000	0.851	910.95	1517.9	479.2	0.846	0.995	1.001	0.995	0.010	0.006	0.35	0.55

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TEST PART MEX10-6 ALPHA WING Y Z RUN SURVEY DATE MEDC PROPULSION WIND TUNNEL
 IC-484 94 2.986 0.08 49 3.00 -1.00 3-2 2-3-77 TRANSONIC 47

POINT	X	M	VM	PT	Q	IT	ML	VML/VN	PTI/PT	CPL	UL/VN	VL/VN	WL/VN	AAL	SMU
6	10.333	0.850	909.98	1510.3	476.0	86.7	0.845	0.995	1.001	0.012	0.995	0.016	-0.007	-0.38	0.92
7	10.666	0.850	910.65	1514.4	477.8	86.6	0.844	0.994	1.000	0.013	0.994	0.018	-0.009	-0.30	1.05
8	11.000	0.850	910.56	1515.8	478.3	86.4	0.839	0.988	1.001	0.025	0.986	0.021	-0.013	-0.77	1.23
9	11.333	0.851	910.67	1515.0	478.2	86.3	0.837	0.986	1.002	0.031	0.986	0.024	-0.018	-1.07	1.38
10	11.666	0.850	910.31	1513.3	477.4	86.3	0.837	0.986	1.002	0.031	0.986	0.024	-0.026	-1.52	1.40
11	12.000	0.852	912.53	1515.6	479.4	86.6	0.841	0.989	1.001	0.024	0.986	0.022	-0.032	-1.87	1.29
12	12.333	0.853	912.70	1515.4	479.5	86.6	0.849	0.997	1.001	0.009	0.996	0.016	-0.037	-2.13	1.02
13	12.666	0.854	913.57	1516.5	480.5	86.5	0.857	1.004	1.001	-0.006	1.003	0.013	-0.038	-2.17	0.77
14	13.000	0.854	914.39	1516.9	481.1	86.5	0.867	1.013	1.000	-0.024	1.021	0.010	-0.037	-2.08	0.54
15	13.333	0.854	913.89	1515.3	480.2	86.6	0.875	1.021	1.001	-0.041	1.021	0.006	-0.030	-1.89	0.35
16	13.666	0.852	911.81	1516.3	479.2	86.5	0.883	1.032	1.001	-0.063	1.031	0.004	-0.030	-1.67	0.23
17	14.000	0.848	908.41	1515.0	476.5	86.6	0.882	1.035	1.002	-0.067	1.035	0.003	-0.026	-1.44	0.18
18	14.333	0.848	909.55	1515.6	477.4	86.6	0.888	1.039	1.001	-0.077	1.039	0.003	-0.022	-1.19	0.16
19	14.666	0.850	910.61	1515.9	478.3	86.5	0.893	1.043	1.001	-0.084	1.043	0.002	-0.017	-0.93	0.13
20	15.000	0.851	911.36	1514.3	478.2	86.6	0.899	1.048	1.002	-0.094	1.048	0.003	-0.011	-0.62	0.16
21	15.333	0.853	912.76	1515.2	479.4	86.7	0.902	1.050	1.001	-0.098	1.050	0.003	-0.006	-0.35	0.17
23	15.666	0.851	911.30	1516.2	479.0	86.3	0.904	1.054	1.002	-0.105	1.054	0.004	0.000	0.01	0.24
24	16.000	0.852	912.12	1515.9	479.2	86.7	0.904	1.053	1.001	-0.104	1.053	0.005	0.005	0.30	0.26
25	16.333	0.854	913.70	1515.0	480.0	86.7	0.906	1.053	1.001	-0.106	1.053	0.006	0.013	0.70	0.31
45	16.666	0.854	913.55	1521.1	481.9	86.5	0.906	1.053	1.001	-0.104	1.052	0.007	0.022	1.21	0.40
46	17.000	0.853	913.24	1515.2	479.7	86.7	0.897	1.044	1.001	-0.086	1.044	0.009	0.028	1.56	0.49
48	17.333	0.848	908.05	1515.2	476.3	86.6	0.878	1.031	1.001	-0.060	1.030	0.011	0.032	1.79	0.61
49	17.666	0.849	907.94	1514.2	476.0	86.5	0.855	1.008	1.001	-0.013	1.007	0.011	0.030	1.69	0.64
50	18.000	0.849	908.94	1515.6	477.1	86.5	0.842	0.993	1.001	0.016	0.993	0.011	0.024	1.36	0.63
51	18.333	0.851	911.07	1516.0	478.7	86.4	0.835	0.983	1.001	0.036	0.983	0.011	0.017	0.97	0.63
52	18.666	0.853	913.36	1516.0	480.2	86.5	0.835	0.981	1.001	0.041	0.981	0.010	0.011	0.62	0.59
59	19.000	0.849	909.13	1520.0	478.5	86.7	0.831	0.982	1.001	0.038	0.982	0.010	0.006	0.36	0.57

TEST PART REX10-6 ALPHA WING Y Z RUN SURVEY
 IC-484 96 2.992 0.08 11 3.00 -2.00 1-1

DATE 2-3-77
 AEDC PROPUSSION WIND TUNNEL
 TRANSONIC 42

POINT	X	M	YM	PT	Q	IT	ML	YML/VN	PTL/PT	CPL	UL/VN	VL/VN	ML/VN	AAL	SWL
5	10.333	0.899	957.08	1485.6	497.7	87.9	0.895	0.996	1.000	0.009	0.996	0.009	-0.005	-0.27	0.49
6	10.666	0.900	957.86	1486.9	498.7	87.6	0.895	0.994	1.001	0.013	0.994	0.010	-0.007	-0.38	0.56
7	11.000	0.900	957.44	1483.2	497.1	87.8	0.892	0.992	1.002	0.018	0.992	0.010	-0.009	-0.50	0.60
8	11.333	0.901	958.46	1483.6	498.0	87.7	0.892	0.992	1.001	0.018	0.992	0.011	-0.012	-0.67	0.65
9	11.666	0.902	959.93	1487.2	499.9	88.0	0.894	0.992	1.001	0.017	0.992	0.012	-0.014	-0.83	0.68
10	12.000	0.902	959.74	1486.2	499.5	88.0	0.895	0.994	1.001	0.015	0.993	0.011	-0.017	-0.98	0.61
11	12.333	0.903	960.34	1485.9	499.7	88.0	0.899	0.996	1.001	0.009	0.996	0.010	-0.019	-1.09	0.56
12	12.666	0.903	960.60	1485.0	499.6	87.9	0.903	1.000	1.001	0.002	0.999	0.008	-0.020	-1.15	0.48
14	13.000	0.904	961.57	1486.5	500.7	87.9	0.909	1.005	1.001	-0.008	1.004	0.007	-0.020	-1.16	0.37
17	13.333	0.904	961.47	1486.0	500.5	87.9	0.913	1.009	1.001	-0.016	1.008	0.005	-0.020	-1.12	0.27
18	13.666	0.905	962.07	1486.2	500.9	87.9	0.917	1.012	1.001	-0.022	1.012	0.004	-0.019	-1.07	0.20
19	14.000	0.903	960.95	1486.3	500.2	88.0	0.922	1.018	1.001	-0.034	1.018	0.003	-0.017	-0.94	0.15
20	14.333	0.902	960.01	1487.0	499.9	88.0	0.925	1.021	1.001	-0.041	1.021	0.001	-0.014	-0.78	0.08
21	14.666	0.904	961.36	1487.5	500.9	88.0	0.928	1.023	1.001	-0.045	1.023	0.001	-0.011	-0.63	0.05
22	15.000	0.905	962.33	1485.5	500.8	88.1	0.932	1.026	1.001	-0.050	1.025	0.001	-0.008	-0.47	0.03
24	15.333	0.902	959.39	1486.6	499.4	88.0	0.934	1.031	1.001	-0.061	1.031	0.001	-0.004	-0.21	0.05
25	15.666	0.902	959.48	1487.1	499.6	88.0	0.936	1.032	1.001	-0.063	1.032	0.001	-0.000	-0.01	0.04
26	16.000	0.904	961.13	1485.1	499.9	88.1	0.938	1.032	1.001	-0.063	1.032	0.001	-0.000	-0.01	0.04
28	16.333	0.903	960.17	1485.1	499.4	88.0	0.941	1.036	1.001	-0.070	1.036	0.002	0.010	0.37	0.13
29	16.666	0.901	958.80	1485.9	498.8	87.9	0.938	1.035	1.001	-0.047	1.035	0.004	0.016	0.89	0.20
30	17.000	0.903	960.34	1485.4	499.6	88.0	0.935	1.030	1.002	-0.058	1.030	0.005	0.021	1.18	0.25
33	17.333	0.903	960.09	1486.3	499.7	88.0	0.926	1.022	1.001	-0.043	1.022	0.006	0.024	1.33	0.33
34	17.666	0.903	960.40	1485.5	499.6	88.0	0.913	1.010	1.001	-0.017	1.009	0.006	0.022	1.27	0.36
36	18.000	0.902	959.59	1485.1	499.0	88.0	0.903	1.001	1.001	0.001	1.000	0.007	0.020	1.12	0.38
37	18.333	0.903	960.51	1486.2	499.9	88.0	0.896	0.993	1.001	0.016	0.993	0.006	0.016	0.93	0.35
38	18.666	0.903	961.01	1485.9	500.1	88.1	0.892	0.990	1.001	0.023	0.999	0.006	0.012	0.72	0.34
39	19.000	0.904	961.12	1486.6	500.4	88.1	0.891	0.988	1.001	0.026	0.988	0.006	0.010	0.56	0.32

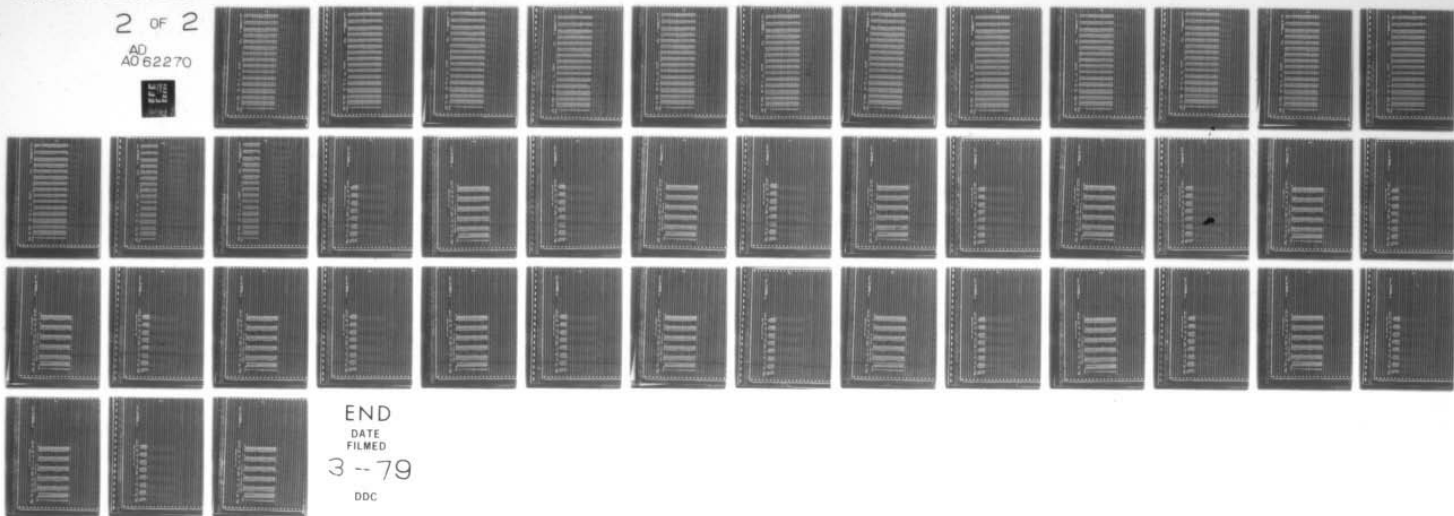
AD-A062 270

NIELSEN ENGINEERING AND RESEARCH INC MOUNTAIN VIEW CALIF F/G 1/3
DATA REPORT FOR A TEST PROGRAM TO STUDY TRANSONIC FLOW FIELDS A--ETC(U)
JUL 77 S C PERKINS, S S STAHARA, M J HEMSCH F44620-75-C-0047
NEAR-TR-138-VOL-1 AFOSR-TR-78-1485 NL

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TEST PART MEX10-A ALPHA WING Y Z RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL
 7C-484 97 2.996 0.08 48 3.00 -1.00 3-2 2-3-77 TRANSONIC AT

POINT	X	P	VM	PT	Q	IT	ML	VML/VN	PTL/PT	CPL	UL/VN	VL/VN	WL/VN	ABL	SNL
5	10.333	0.907	955.74	1486.7	497.0	88.3	0.888	0.991	1.001	0.021	0.990	0.011	-0.003	-0.15	0.63
6	10.466	0.901	954.57	1486.2	498.7	88.0	0.889	0.988	1.001	0.025	0.988	0.014	-0.004	-0.26	0.78
7	11.000	0.902	959.49	1485.6	499.1	88.0	0.884	0.983	1.001	0.035	0.983	0.016	-0.008	-0.49	0.96
8	11.333	0.903	960.60	1484.7	500.1	88.1	0.882	0.980	1.001	0.041	0.980	0.020	-0.014	-0.84	1.18
9	11.666	0.903	961.11	1486.6	500.3	88.2	0.882	0.979	1.001	0.043	0.979	0.022	-0.014	-1.27	1.26
10	12.000	0.904	961.05	1487.3	500.6	88.0	0.884	0.981	1.001	0.039	0.981	0.020	-0.029	-1.69	1.15
11	12.333	0.902	959.98	1484.3	498.9	88.2	0.889	0.977	1.002	0.028	0.987	0.015	-0.034	-1.39	0.89
12	12.666	0.904	961.38	1486.7	500.6	88.0	0.898	0.994	1.001	0.012	0.994	0.011	-0.036	-2.06	0.64
15	13.000	0.901	958.58	1487.4	499.1	88.1	0.906	1.005	1.001	-0.008	1.004	0.006	-0.036	-2.03	0.33
16	13.333	0.899	957.05	1483.4	496.9	88.0	0.910	1.011	1.002	-0.017	1.010	0.002	-0.033	-1.88	0.12
17	13.666	0.902	959.92	1486.7	499.7	88.1	0.918	1.015	1.001	-0.030	1.015	0.000	-0.030	-1.68	0.00
18	14.000	0.902	959.63	1486.2	499.3	88.1	0.924	1.021	1.002	-0.039	1.020	-0.001	-0.026	-1.45	-0.07
19	14.333	0.903	961.06	1486.2	500.1	88.3	0.929	1.024	1.001	-0.047	1.024	-0.002	-0.021	-1.19	-0.13
20	14.666	0.901	958.58	1486.9	498.9	88.1	0.931	1.028	1.001	-0.056	1.028	-0.003	-0.017	-0.95	-0.17
21	15.000	0.901	959.29	1485.3	498.8	88.2	0.935	1.032	1.001	-0.062	1.032	-0.003	-0.012	-0.66	-0.15
22	15.333	0.903	960.64	1486.3	499.9	88.3	0.938	1.033	1.001	-0.066	1.033	-0.002	-0.007	-0.39	-0.14
23	15.666	0.905	962.13	1486.7	501.0	88.2	0.942	1.035	1.001	-0.069	1.035	-0.002	-0.001	-0.08	-0.10
25	16.000	0.900	957.82	1485.4	498.0	88.0	0.943	1.040	1.001	-0.080	1.040	-0.001	-0.006	0.30	-0.05
26	16.333	0.900	958.11	1485.6	498.1	88.2	0.960	1.057	1.001	-0.111	1.057	-0.001	0.013	0.68	-0.01
27	16.666	0.903	960.32	1487.1	500.0	88.3	0.976	1.068	1.001	-0.136	1.068	0.002	0.023	1.24	0.09
28	17.000	0.904	962.06	1487.1	501.0	88.4	0.967	1.059	1.001	-0.116	1.059	0.004	0.032	1.74	0.23
30	17.333	0.902	959.78	1487.5	499.8	88.4	0.931	1.027	1.001	-0.053	1.027	0.007	0.037	2.09	0.40
31	17.666	0.902	960.27	1485.5	499.4	88.3	0.910	1.006	1.001	-0.013	1.007	0.008	0.036	2.03	0.47
33	18.000	0.904	961.54	1486.5	500.6	88.3	0.889	0.986	1.001	0.029	0.986	0.008	0.028	1.66	0.48
34	18.333	0.903	960.80	1487.6	500.4	88.4	0.877	0.975	1.001	0.050	0.975	0.007	0.021	1.23	0.40
35	18.666	0.904	961.89	1487.8	501.2	88.3	0.876	0.973	1.001	0.056	0.973	0.006	0.014	0.83	0.37
38	19.000	0.903	961.17	1485.9	500.0	88.4	0.880	0.978	1.001	0.046	0.978	0.006	0.010	0.56	0.34

TEST PART		RE10-6		ALFA		WING		Y		Z		RUN SURVEY		DATE		AEDC PROPUSSION WIND TUNNEL					
TC-404		99		2.994		0.06		46		3.00		-2.00		3- 1		2- 3-77		TRANSONIC 42			
POINT	X	N	VM	PT	IT	ML	VHL/V4	PTL/PT	CPL	UL/VM	VL/VM	UL/VA	AAL	SWL							
7	10.333	0.949	1002.25	1457.4	88.6	0.927	0.980	1.001	0.040	0.980	0.010	-0.003	-0.19	0.56							
8	10.666	0.949	1002.61	1459.1	88.6	0.926	0.979	1.001	0.043	0.979	0.010	-0.007	-0.29	0.59							
9	11.000	0.949	1002.65	1459.0	88.6	0.923	0.977	1.001	0.048	0.977	0.011	-0.008	-0.45	0.66							
10	11.333	0.946	1003.10	1458.4	88.6	0.921	0.975	1.001	0.052	0.975	0.012	-0.011	-0.66	0.72							
11	11.666	0.950	1003.70	1459.1	88.4	0.922	0.975	1.001	0.052	0.975	0.013	-0.014	-0.81	0.76							
12	12.000	0.950	1003.59	1458.9	88.3	0.924	0.976	1.001	0.049	0.976	0.013	-0.017	-1.01	0.74							
13	12.333	0.951	1004.45	1457.8	88.3	0.926	0.977	1.001	0.046	0.977	0.012	-0.019	-1.13	0.69							
14	12.666	0.952	1005.14	1458.0	88.3	0.930	0.981	1.001	0.040	0.980	0.010	-0.021	-1.22	0.60							
15	13.000	0.953	1005.94	1459.2	88.6	0.933	0.983	1.001	0.036	0.983	0.009	-0.022	-1.27	0.50							
16	13.333	0.953	1006.63	1459.3	88.6	0.937	0.985	1.001	0.032	0.985	0.007	-0.021	-1.23	0.42							
17	13.666	0.954	1007.48	1458.0	88.6	0.940	0.987	1.002	0.029	0.987	0.005	-0.020	-1.18	0.31							
20	14.000	0.954	1006.97	1459.2	88.5	0.944	0.991	1.001	0.020	0.991	0.004	-0.018	-1.07	0.24							
22	14.333	0.952	1005.34	1458.9	88.5	0.964	1.010	1.001	-0.019	1.010	0.003	-0.016	-0.92	0.19							
23	14.666	0.952	1004.94	1458.5	88.3	0.969	1.015	1.001	-0.028	1.015	0.003	-0.014	-0.79	0.14							
24	15.000	0.953	1006.25	1457.7	88.4	0.975	1.019	1.001	-0.037	1.019	0.002	-0.011	-0.62	0.13							
25	15.333	0.955	1007.56	1458.5	88.5	0.986	1.028	1.001	-0.054	1.028	0.002	-0.008	-0.42	0.09							
26	15.666	0.952	1005.14	1460.5	88.6	0.991	1.035	1.001	-0.068	1.035	0.002	-0.004	-0.21	0.09							
27	16.000	0.951	1004.83	1458.5	88.5	0.995	1.038	1.002	-0.075	1.038	0.002	0.001	0.05	0.18							
28	16.333	0.953	1006.61	1458.2	88.6	1.007	1.047	1.001	-0.091	1.047	0.002	0.007	0.38	0.12							
29	16.666	0.955	1007.64	1459.0	88.6	1.018	1.055	1.001	-0.109	1.055	0.003	0.014	0.77	0.18							
30	17.000	0.953	1006.20	1459.4	88.6	1.044	1.079	1.000	-0.158	1.079	0.004	0.025	1.32	0.19							
31	17.333	0.952	1005.59	1457.6	88.6	1.020	1.060	1.002	-0.117	1.059	0.009	0.030	1.51	0.48							
32	17.666	0.954	1007.18	1458.0	88.6	0.964	1.008	1.001	-0.016	1.008	0.011	0.029	1.63	0.23							
33	18.000	0.954	1006.73	1460.2	88.6	0.930	0.979	1.000	0.042	0.979	0.010	0.024	1.47	0.29							
34	18.333	0.952	1005.30	1458.6	88.4	0.922	0.973	1.001	0.056	0.973	0.009	0.020	1.16	0.50							
35	18.666	0.954	1007.30	1459.0	88.3	0.918	0.968	1.000	0.065	0.967	0.008	0.016	0.93	0.48							
37	19.000	0.953	1006.43	1458.2	88.3	0.919	0.969	1.000	0.062	0.969	0.007	0.012	0.70	0.40							

TEST PART RFXIO-6 ALFA WING Y 2 RUN SURVEY DATE 2-3-77 AEDC PROPUSSION WIND TUNNEL
 TC-484 100 3.003 0.00 40 3.00 -1.00 3-2

POINT	X	M	VM	PT	O	TT	VL	VWL/VN	PTL/PT	CPL	UL/VN	VL/VN	WL/VN	AAL	SWL
5	10.333	0.348	1001.19	1461.6	515.3	88.4	0.924	0.978	1.000	0.043	0.978	0.011	-0.001	-0.07	0.66
6	10.466	0.947	1001.04	1460.3	514.8	88.4	0.919	0.974	1.001	0.053	0.974	0.014	-0.003	-0.19	0.84
7	11.000	0.947	1000.78	1455.4	513.0	88.2	0.913	0.969	1.002	0.065	0.969	0.018	-0.007	-0.44	1.07
8	11.333	0.949	1002.02	1456.4	513.1	88.2	0.911	0.966	1.001	0.070	0.965	0.022	-0.013	-0.79	1.29
9	11.666	0.950	1002.98	1459.9	515.8	88.3	0.910	0.964	1.001	0.073	0.964	0.024	-0.021	-1.27	1.41
10	12.000	0.950	1003.05	1457.2	515.9	88.3	0.911	0.965	1.001	0.072	0.964	0.022	-0.029	-1.74	1.33
11	12.333	0.951	1003.86	1457.8	515.5	88.4	0.916	0.969	1.001	0.064	0.968	0.019	-0.034	-2.01	1.11
12	12.666	0.952	1004.81	1460.4	517.0	88.4	0.923	0.974	1.001	0.054	0.973	0.013	-0.037	-2.18	0.78
13	13.000	0.952	1005.09	1458.8	516.5	88.5	0.928	0.979	1.001	0.045	0.978	0.008	-0.037	-2.17	0.48
14	13.333	0.952	1005.66	1457.7	516.4	88.5	0.934	0.983	1.001	0.035	0.983	0.005	-0.035	-2.06	0.27
15	13.666	0.954	1006.89	1459.6	517.7	88.6	0.939	0.987	1.001	0.027	0.987	0.002	-0.032	-1.86	0.12
16	14.000	0.953	1005.84	1459.1	517.0	88.5	0.943	0.991	1.001	0.019	0.991	0.001	-0.027	-1.57	0.05
17	14.333	0.954	1006.94	1460.0	518.1	88.2	0.944	1.009	1.000	-0.018	1.008	0.000	-0.024	-1.34	0.00
18	14.666	0.952	1005.27	1457.7	516.3	88.4	0.974	1.019	1.001	-0.036	1.019	-0.001	-0.019	-1.05	-0.05
19	15.000	0.951	1004.46	1458.0	515.9	88.4	0.981	1.026	1.001	-0.050	1.026	-0.001	-0.014	-0.80	-0.06
20	15.333	0.952	1005.53	1460.3	517.3	88.4	0.983	1.033	1.001	-0.064	1.033	-0.001	-0.009	-0.51	-0.03
21	15.666	0.952	1005.50	1457.4	516.3	88.3	0.995	1.037	1.002	-0.071	1.037	-0.001	-0.004	-0.24	-0.04
22	16.000	0.954	1007.07	1456.0	516.6	88.5	1.005	1.045	1.001	-0.088	1.045	-0.001	-0.001	-0.07	-0.01
23	16.333	0.951	1004.79	1461.1	517.1	88.6	1.021	1.061	1.001	-0.120	1.061	-0.000	0.011	0.57	0.01
24	16.666	0.952	1004.82	1457.4	516.0	88.3	1.030	1.068	1.001	-0.135	1.068	0.001	0.019	1.03	0.05
25	17.000	0.955	1007.70	1458.9	518.1	88.3	1.047	1.080	1.000	-0.160	1.079	0.005	0.031	1.63	0.27
26	17.333	0.953	1006.35	1459.5	517.4	88.6	1.016	1.055	1.000	-0.110	1.054	0.013	0.037	2.04	0.73
27	17.666	0.953	1006.54	1459.3	517.5	88.5	0.936	0.987	1.000	0.027	0.986	0.014	0.037	2.16	0.81
28	18.000	0.951	1004.46	1457.1	515.6	88.3	0.916	0.968	1.000	0.064	0.967	0.012	0.031	1.83	0.74
29	18.333	0.953	1005.66	1458.8	516.2	88.3	0.905	0.957	1.000	0.085	0.954	0.010	0.024	1.23	0.50
30	18.666	0.954	1007.33	1458.8	517.7	88.6	0.903	0.954	0.999	0.090	0.954	0.009	0.018	1.05	0.32
31	19.000	0.952	1005.56	1459.3	516.9	88.6	0.907	0.959	1.000	0.082	0.959	0.008	0.013	0.75	0.48

TEST PART REX10-6 ALPHA WING Y 2 RUN SUPPLY DATE AEDC PROPELLSION WIND TUNNEL
 TC-484 102 3.020 0.00 46 3.00 -2.00 3-1 2-3-77 TRANSONIC AT

POINT	X	M	VM	PT	O	TT	ML	VM/VH	FTL/PT	CPL	UL/VM	VL/VM	WL/VM	AAL	SWL
5	10.333	0.999	1046.82	1451.0	536.3	88.7	0.944	0.954	1.000	0.092	0.954	0.008	-0.005	-0.28	0.51
6	10.666	0.996	1044.69	1440.3	531.0	88.6	0.931	0.944	1.001	0.112	0.944	0.009	-0.006	-0.39	0.53
9	11.000	0.990	1046.75	1441.4	532.5	88.5	0.930	0.941	1.000	0.118	0.941	0.010	-0.009	-0.52	0.61
10	11.333	0.998	1046.31	1441.5	532.3	88.7	0.928	0.940	1.001	0.121	0.940	0.011	-0.011	-0.69	0.68
11	11.666	0.998	1046.10	1438.3	531.0	88.4	0.928	0.940	1.001	0.122	0.940	0.011	-0.015	-0.89	0.69
12	12.000	1.000	1047.61	1439.3	537.1	88.4	0.929	0.940	1.001	0.120	0.940	0.011	-0.017	-1.04	0.68
13	12.333	1.000	1048.06	1442.4	533.4	88.8	0.932	0.942	1.000	0.116	0.942	0.011	-0.020	-1.19	0.64
14	12.666	1.000	1048.23	1443.3	533.9	89.0	0.935	0.945	1.001	0.111	0.944	0.009	-0.021	-1.27	0.57
15	13.000	0.998	1046.22	1440.6	531.8	88.9	0.937	0.948	1.001	0.106	0.948	0.007	-0.022	-1.31	0.49
16	13.333	0.998	1046.78	1432.5	529.2	88.7	0.939	0.949	1.001	0.103	0.949	0.006	-0.023	-1.36	0.37
17	13.666	1.002	1050.02	1441.1	533.9	88.9	0.960	0.965	1.000	0.071	0.965	0.004	-0.021	-1.28	0.26
18	14.000	1.000	1047.46	1440.7	532.6	88.7	0.964	0.970	1.001	0.062	0.970	0.004	-0.020	-1.18	0.21
19	14.333	0.999	1046.66	1436.0	530.5	88.6	0.971	0.977	1.002	0.049	0.977	0.003	-0.018	-1.04	0.16
20	14.666	1.001	1048.39	1439.1	532.5	88.6	0.983	0.985	1.000	0.030	0.985	0.002	-0.015	-0.89	0.11
21	15.000	1.001	1048.59	1439.1	532.6	88.5	0.987	0.988	1.001	0.024	0.988	0.002	-0.013	-0.73	0.09
22	15.333	1.001	1048.99	1436.5	531.8	88.6	0.996	0.995	1.001	0.011	0.995	0.001	-0.009	-0.53	0.08
23	15.666	1.001	1048.72	1435.8	531.4	88.6	1.002	1.001	1.001	-0.001	1.001	0.001	-0.006	-0.33	0.07
24	16.000	1.002	1049.70	1438.6	533.0	88.6	1.006	1.005	1.000	-0.010	1.005	0.002	-0.001	-0.06	0.12
25	16.333	1.002	1049.83	1439.6	533.4	88.6	1.024	1.018	1.001	-0.034	1.018	0.002	-0.004	-0.25	0.23
26	16.666	1.002	1049.30	1434.1	531.1	88.6	1.059	1.047	1.001	-0.092	1.047	0.001	0.013	0.72	0.03
27	17.000	1.002	1050.03	1436.8	533.4	88.7	1.084	1.067	1.000	-0.133	1.066	0.001	0.020	1.04	0.03
28	17.333	1.003	1050.34	1438.9	533.3	88.8	1.111	1.087	1.000	-0.174	1.087	0.001	0.029	1.51	0.04
29	17.666	1.002	1049.48	1436.7	532.1	88.8	1.136	1.110	1.000	-0.219	1.109	0.001	0.039	2.03	0.07
30	18.000	1.003	1050.70	1437.7	532.1	88.6	1.157	1.123	0.998	-0.246	1.122	0.004	0.047	2.41	0.19
31	18.333	1.003	1050.90	1436.6	532.7	88.6	1.131	1.102	0.997	-0.207	1.101	0.011	0.038	1.96	0.19
32	18.666	1.004	1051.46	1441.6	534.8	89.1	1.006	1.002	0.998	-0.007	1.002	0.013	0.014	0.79	0.76
33	19.000	1.002	1049.75	1436.1	532.0	88.8	0.971	0.974	0.999	0.049	0.974	0.011	0.007	0.48	0.62

TEST PART REX10-6 ALPHA WING Y 2 RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL
TC-484 103 3.003 0.08 40 3.00 -1.00 3-2 3-77 TRANSONIC 4T

POINT	X	M	V _M	PT	Q	TT	ML	YML/VN	PTL/PT	CPL	UL/VN	VL/VN	ML/VN	AAL	SPL
1	10.333	0.996	1046.70	1430.9	531.2	88.6	0.936	0.940	1.000	0.103	0.949	0.011	-0.004	-0.22	0.65
7	10.466	0.998	1046.52	1439.7	531.6	88.9	0.930	0.942	1.000	0.115	0.942	0.011	-0.003	-0.27	0.79
8	11.000	0.998	1046.51	1433.6	533.1	88.8	0.924	0.937	1.000	0.126	0.937	0.016	-0.008	-0.49	1.00
9	11.333	0.996	1046.91	1431.5	531.5	88.9	0.917	0.932	1.001	0.137	0.932	0.020	-0.013	-0.80	1.23
10	11.666	0.996	1046.70	1431.8	527.7	89.1	0.913	0.929	1.002	0.144	0.929	0.022	-0.021	-1.28	1.34
11	12.000	1.001	1049.99	1433.1	534.1	89.0	0.919	0.930	1.000	0.139	0.930	0.021	-0.030	-1.84	1.31
12	12.333	0.998	1046.67	1432.6	533.0	88.8	0.920	0.933	1.001	0.135	0.932	0.017	-0.035	-2.14	1.08
13	12.666	0.998	1046.07	1435.3	529.9	88.7	0.925	0.936	1.002	0.126	0.937	0.012	-0.037	-2.27	0.76
14	13.000	1.000	1047.84	1438.0	531.7	88.9	0.932	0.943	0.999	0.113	0.942	0.008	-0.037	-2.26	0.47
15	13.333	1.002	1049.84	1445.7	535.1	88.9	0.939	0.947	1.001	0.108	0.946	0.004	-0.035	-2.14	0.34
16	13.666	0.997	1045.69	1432.7	528.7	88.7	0.941	0.952	1.002	0.099	0.951	0.001	-0.032	-1.92	0.84
17	14.000	0.999	1047.53	1432.4	529.7	89.0	0.943	0.971	1.001	0.089	0.971	0.000	-0.028	-1.67	0.80
19	14.333	1.001	1049.16	1433.1	534.9	89.1	0.975	0.979	1.001	0.045	0.978	-0.001	-0.024	-1.39	-0.03
20	14.666	1.000	1049.49	1436.9	531.5	89.1	0.979	0.982	1.001	0.037	0.982	-0.001	-0.020	-1.16	-0.06
21	15.000	1.002	1049.99	1439.2	533.1	89.0	0.994	0.994	1.000	0.013	0.994	-0.002	-0.016	-0.92	-0.09
22	15.333	1.003	1051.18	1442.4	534.9	89.0	1.003	1.000	1.001	0.002	0.999	-0.001	-0.011	-0.62	-0.08
23	15.666	1.001	1048.84	1438.5	532.3	89.0	1.006	1.005	1.002	-0.007	1.005	-0.001	-0.006	-0.34	-0.05
24	16.000	1.001	1049.78	1436.9	531.6	89.1	1.014	1.011	1.001	-0.022	1.011	-0.000	-0.001	-0.05	-0.02
25	16.333	1.003	1050.72	1440.2	534.0	89.8	1.032	1.024	1.000	-0.048	1.024	0.000	0.006	0.14	0.02
26	16.666	1.003	1050.36	1440.5	533.8	89.0	1.055	1.043	1.000	-0.087	1.043	0.000	0.016	0.85	0.02
27	17.000	1.003	1050.52	1438.7	533.2	89.0	1.102	1.080	0.999	-0.161	1.080	0.000	0.028	1.50	0.01
28	17.333	1.002	1049.71	1439.4	533.1	89.0	1.148	1.117	0.999	-0.234	1.116	0.001	0.044	2.25	0.08
29	17.666	1.002	1049.98	1440.3	533.5	89.1	1.155	1.122	0.997	-0.246	1.121	0.006	0.049	2.51	0.32
30	18.000	1.001	1049.34	1437.4	532.0	89.2	1.102	1.082	0.997	-0.167	1.081	0.015	0.036	1.93	0.06
31	18.333	1.003	1050.59	1439.2	533.5	89.8	0.998	0.996	0.997	0.003	0.995	0.017	0.021	1.20	0.99
32	18.666	1.003	1050.59	1439.4	533.6	89.5	0.987	0.986	0.999	0.025	0.986	0.014	0.012	0.70	0.84
33	19.000	1.004	1052.05	1437.5	533.5	89.2	0.994	0.991	1.000	0.017	0.991	0.011	0.008	0.47	0.63

TEST PART REX10-6 ALPHA WING Y 2 RUN SURVEY

IC-484 105 3.003 0.08 48 3.00 -2.00 3.1

DATE 2-3-77

AEC PROPULSION WIND TUNNEL
TRANSONIC 42

POINT	X	M	Y	PT	IT	ML	VNL/VN	PTL/PT	CPL	UL/VN	VL/VN	ML/VN	AAL	SML
5	10.333	1.029	1075.31	1436.7	91.0	1.092	1.049	1.000	-0.099	1.049	-0.001	0.002	0.12	-0.05
6	10.666	1.030	1075.93	1437.5	91.0	1.073	1.034	0.999	-0.070	1.034	0.003	-0.001	-0.08	0.16
7	11.000	1.026	1072.73	1437.6	91.0	1.005	0.983	1.000	0.034	0.983	0.008	-0.008	-0.45	0.47
8	11.333	1.025	1071.96	1435.9	90.9	0.987	0.969	1.002	0.044	0.969	0.011	-0.012	-0.70	0.64
9	11.666	1.027	1073.66	1436.7	90.7	0.984	0.965	1.001	0.072	0.964	0.012	-0.017	-0.98	0.71
10	12.000	1.028	1074.22	1435.1	90.8	0.982	0.962	1.001	0.077	0.962	0.012	-0.019	-1.16	0.72
11	12.333	1.030	1075.71	1436.1	91.0	0.980	0.960	1.001	0.082	0.959	0.011	-0.022	-1.29	0.65
12	12.666	1.024	1071.01	1437.7	90.9	0.978	0.962	1.001	0.078	0.962	0.010	-0.023	-1.36	0.57
13	13.000	1.024	1070.79	1436.7	91.0	0.975	0.960	1.002	0.083	0.960	0.009	-0.023	-1.39	0.47
14	13.333	1.028	1074.19	1439.1	91.0	0.980	0.962	1.000	0.076	0.961	0.006	-0.023	-1.36	0.36
15	13.666	1.028	1074.14	1436.1	91.0	0.985	0.965	1.002	0.073	0.965	0.004	-0.022	-1.28	0.26
16	14.000	1.028	1074.06	1435.6	91.0	0.989	0.969	1.001	0.064	0.969	0.003	-0.019	-1.15	0.16
17	14.333	1.024	1070.56	1437.2	91.0	0.984	0.968	1.002	0.067	0.968	0.001	-0.016	-0.97	0.07
18	14.666	1.026	1073.21	1436.8	91.2	0.991	0.971	1.002	0.060	0.971	0.000	-0.014	-0.83	0.01
19	15.000	1.026	1075.68	1437.0	91.2	0.998	0.975	1.001	0.051	0.975	-0.000	-0.011	-0.63	-0.02
21	15.333	1.023	1070.17	1435.3	91.3	0.999	0.981	1.002	0.041	0.981	-0.001	-0.007	-0.43	-0.03
22	15.666	1.025	1071.88	1439.4	91.3	1.004	0.984	1.001	0.034	0.984	-0.001	-0.004	-0.21	-0.05
23	16.000	1.027	1073.61	1437.0	91.3	1.009	0.983	1.001	0.035	0.983	-0.000	0.001	0.04	-0.01
24	16.333	1.025	1071.93	1436.8	91.3	1.030	1.004	1.001	-0.006	1.004	-0.000	0.008	0.45	-0.00
25	16.666	1.025	1071.78	1431.7	91.3	1.057	1.026	1.000	-0.053	1.026	-0.002	0.015	0.86	-0.09
26	17.000	1.025	1072.62	1436.8	91.4	1.080	1.043	1.000	-0.086	1.043	-0.002	0.022	1.22	-0.13
27	17.333	1.029	1075.39	1437.6	91.4	1.106	1.063	1.000	-0.124	1.062	-0.002	0.031	1.68	-0.12
28	17.666	1.021	1069.19	1438.0	91.6	1.133	1.088	1.000	-0.175	1.087	-0.002	0.041	2.17	-0.09
29	18.000	1.027	1074.25	1439.8	91.4	1.151	1.096	0.998	-0.193	1.095	-0.001	0.049	2.54	0.08
30	18.333	1.026	1075.81	1438.8	91.3	1.086	1.045	0.999	-0.092	1.045	-0.010	0.031	1.68	0.04
34	18.666	1.022	1069.95	1431.6	91.4	0.982	0.967	0.997	0.061	0.967	0.010	0.014	0.85	0.59
35	19.000	1.027	1076.20	1437.6	91.7	0.973	0.956	0.999	0.086	0.956	0.007	0.008	0.47	0.31

147-

TEST PART NEX10-6 ALPHA WING Y Z RUN SURVEY DATE AEDC PROPELLION WIND TUNNEL
 106 2.996 0.08 43 3.00 -1.00 3- 2 2- 3-77 TRANSONIC 47

POINT	X	M	VM	PT	Q	IT	NL	VNL/VM	PTL/PT	CPL	UL/VM	VL/VM	NL/VM	AAL	SML
2	10.333	1.027	1074.42	1335.9	542.7	91.6	1.081	1.042	1.000	-0.005	1.042	0.003	0.002	0.09	0.15
3	10.666	1.025	1072.82	1337.4	542.5	91.6	1.024	0.999	1.000	0.002	0.999	0.009	-0.003	-0.15	0.52
4	11.000	1.027	1073.86	1337.7	543.1	91.5	0.991	0.971	1.001	0.059	0.971	0.015	-0.008	-0.45	0.89
5	11.333	1.028	1075.16	1338.7	546.1	91.6	0.975	0.957	1.001	0.087	0.957	0.020	-0.014	-0.85	1.19
6	11.666	1.022	1070.12	1337.9	541.4	91.5	0.963	0.951	1.001	0.100	0.950	0.024	-0.021	-1.29	1.44
7	12.000	1.025	1072.38	1337.5	542.4	91.4	0.941	0.931	1.000	0.100	0.930	0.023	-0.030	-1.86	1.44
8	12.333	1.027	1074.10	1339.9	543.1	91.4	0.944	0.931	1.001	0.139	0.931	0.019	-0.036	-2.20	1.16
9	12.666	1.028	1074.66	1335.0	544.8	91.3	0.961	0.945	1.001	0.112	0.944	0.013	-0.038	-2.31	0.79
10	13.000	1.029	1075.63	1340.0	544.8	91.6	0.972	0.958	1.000	0.093	0.953	0.008	-0.038	-2.29	0.46
11	13.333	1.027	1073.61	1337.2	542.9	91.3	0.975	0.958	1.001	0.066	0.957	0.004	-0.035	-2.12	0.21
12	13.666	1.022	1069.82	1340.0	542.1	91.5	0.970	0.957	1.000	0.085	0.957	-0.000	-0.031	-1.85	-0.02
13	14.000	1.022	1069.97	1337.8	541.3	91.5	0.978	0.944	1.002	0.075	0.964	-0.001	-0.027	-1.60	-0.07
14	14.333	1.026	1071.09	1338.7	543.1	91.6	0.991	0.971	1.001	0.059	0.971	-0.002	-0.023	-1.34	-0.09
15	14.666	1.028	1075.06	1338.5	545.0	91.6	0.996	0.974	1.001	0.054	0.973	-0.003	-0.019	-1.10	-0.15
16	15.000	1.029	1075.51	1335.7	543.2	91.4	1.004	0.980	1.002	0.048	0.980	-0.003	-0.014	-0.82	-0.17
17	15.333	1.023	1071.04	1339.3	542.3	91.6	1.009	0.988	1.001	0.028	0.988	-0.003	-0.009	-0.50	-0.17
18	15.666	1.022	1069.66	1339.3	541.7	91.5	1.009	0.989	1.000	0.022	0.989	-0.003	-0.004	-0.23	-0.19
19	16.000	1.024	1071.65	1338.2	542.3	91.7	1.017	0.994	1.001	0.013	0.994	-0.003	-0.002	0.10	-0.17
20	16.333	1.027	1074.32	1338.6	543.5	91.6	1.031	1.003	1.001	-0.005	1.003	-0.002	0.009	0.49	-0.19
21	16.666	1.022	1070.14	1336.8	540.8	91.9	1.052	1.024	1.000	-0.047	1.024	-0.002	0.016	0.59	-0.12
22	17.000	1.025	1072.40	1338.3	542.7	91.5	1.092	1.053	1.001	-0.105	1.052	-0.002	0.029	1.60	-0.11
23	17.333	1.029	1075.38	1337.2	543.7	91.5	1.135	1.083	0.999	-0.167	1.082	-0.001	0.043	2.27	-0.04
24	17.666	1.024	1071.39	1440.0	542.7	91.7	1.136	1.088	0.997	-0.179	1.087	-0.001	0.046	2.42	0.36
25	18.000	1.025	1072.58	1338.3	542.7	91.7	1.076	1.041	0.997	-0.206	1.040	0.013	0.035	1.94	0.71
26	18.333	1.030	1076.91	1441.6	545.8	92.0	0.986	0.964	0.996	0.068	0.964	0.014	0.022	1.30	0.86
27	18.666	1.021	1069.30	1439.0	541.2	92.0	0.978	0.965	1.000	0.070	0.965	0.010	0.013	0.78	0.62
28	19.000	1.023	1070.89	1439.6	542.2	91.9	0.993	0.976	1.000	0.049	0.976	0.008	0.010	0.59	0.69

TEST PART REF10-6 ALPHA WING Y 2 RUN SURVEY
JC-484 108 3.002 0.00 48 3.00 -2.00 3-1

DATE
2-3-77

AEDC PROPELLSION WIND TUNNEL
TRANSONIC 42

POINT	X	Y	Z	PT	ML	VML/VN	PTL/PT	CPL	DL/VN	VL/VN	ML/VN	AAL	SML
6	10.333	1.049	1093.25	1433.5	550.3	1.047	0.999	-0.096	1.047	0.001	0.002	0.09	0.07
7	10.666	1.052	1095.81	1431.3	550.8	1.013	1.000	-0.025	1.013	0.006	-0.002	-0.12	0.26
8	11.000	1.050	1094.33	1431.3	550.1	1.046	0.997	0.007	0.997	0.010	-0.008	-0.45	0.56
9	11.333	1.052	1095.62	1433.1	551.3	1.015	1.000	0.058	0.971	0.013	-0.014	-0.03	0.77
10	11.666	1.053	1096.45	1431.6	551.1	1.015	1.000	0.050	0.970	0.014	-0.019	-1.15	0.83
11	12.000	1.054	1097.64	1432.8	552.2	1.015	1.000	0.052	0.969	0.014	-0.022	-1.33	0.85
13	12.333	1.046	1090.73	1432.6	548.9	1.010	1.001	0.059	0.971	0.013	-0.026	-1.55	0.76
14	12.666	1.049	1093.25	1432.9	550.2	0.968	1.000	0.064	0.967	0.011	-0.028	-1.63	0.66
15	13.000	1.051	1095.42	1431.9	550.7	0.971	1.001	0.050	0.971	0.009	-0.022	-1.63	0.54
16	13.333	1.053	1097.05	1432.8	551.8	0.976	1.001	0.049	0.976	0.006	-0.027	-1.60	0.37
17	13.666	1.054	1097.54	1429.8	550.9	0.986	1.001	0.031	0.985	0.005	-0.025	-1.47	0.31
20	14.000	1.051	1094.83	1432.1	550.6	1.051	1.001	0.001	1.000	0.004	-0.021	-1.22	0.25
21	14.333	1.050	1094.68	1431.8	550.3	1.056	1.004	-0.007	1.004	0.004	-0.019	-1.06	0.21
22	14.666	1.053	1096.51	1431.9	551.3	1.072	1.015	-0.029	1.014	0.003	-0.015	-0.83	0.16
24	15.000	1.052	1098.06	1431.8	551.0	1.089	1.028	-0.056	1.028	0.001	-0.009	-0.50	0.08
25	15.333	1.049	1093.15	1432.7	550.0	1.095	1.036	-0.073	1.036	0.000	-0.006	-0.35	0.03
26	15.666	1.050	1094.59	1433.8	551.1	1.109	1.045	-0.090	1.045	0.000	-0.003	-0.16	0.00
27	16.000	1.053	1096.36	1433.4	551.7	1.119	1.051	-0.102	1.051	0.001	0.000	0.02	0.08
28	16.333	1.054	1097.84	1431.6	551.7	1.131	1.058	-0.116	1.058	0.002	0.004	0.20	0.08
30	16.666	1.052	1095.57	1432.0	550.8	1.139	1.066	-0.133	1.066	0.000	0.011	0.50	0.03
31	17.000	1.050	1094.39	1433.2	550.7	1.131	1.062	-0.123	1.061	-0.005	0.021	1.14	-0.30
32	17.333	1.052	1095.56	1431.2	550.5	1.152	1.076	-0.152	1.076	-0.005	0.029	1.56	-0.27
34	17.666	1.046	1090.87	1432.1	548.6	1.156	1.084	-0.167	1.083	0.001	0.040	2.04	0.03
35	18.000	1.049	1093.55	1433.3	550.3	1.180	1.099	-0.198	1.097	-0.001	0.051	2.64	-0.06
36	18.333	1.051	1095.67	1432.4	550.9	1.191	1.105	-0.213	1.104	0.001	0.055	2.85	0.08
38	18.666	1.053	1097.05	1431.4	551.2	1.144	1.069	-0.144	1.069	0.009	0.026	1.39	0.50
40	19.000	1.048	1092.50	1431.8	549.3	1.001	0.963	0.069	0.963	0.013	0.008	0.47	0.75

TEST PART RESIO-6 ALPHA WING Y Z RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL
TC-484 109 2.994 0.08 48 3.00 -1.00 3-2

POINT	X	Y	Z	W	V4	PT	Q	TT	ML	VML/VW	PTL/PT	CPL	UL/VW	VL/VW	BL/VW	AAL	SWL
2	10.333	1.046	1090.81	1430.0	548.0	91.8	1.059	1.041	0.004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.20
3	10.666	1.051	1095.22	1432.7	550.9	92.0	1.038	1.005	0.011	0.002	0.002	0.002	0.002	0.002	0.002	0.10	0.64
4	11.000	1.052	1096.21	1432.5	551.3	92.0	1.013	0.969	0.018	0.007	0.007	0.007	0.007	0.007	0.007	0.007	1.08
5	11.333	1.053	1096.75	1430.6	550.8	92.0	1.000	0.958	0.024	0.014	0.014	0.014	0.014	0.014	0.014	0.014	1.42
7	11.666	1.052	1096.21	1432.5	551.3	92.0	0.994	0.954	0.027	0.024	0.024	0.024	0.024	0.024	0.024	0.024	1.64
8	12.000	1.053	1096.21	1431.7	551.1	91.8	0.992	0.952	0.026	0.022	0.022	0.022	0.022	0.022	0.022	0.022	1.58
9	12.333	1.054	1097.64	1432.0	551.7	92.0	0.996	0.954	0.023	0.020	0.020	0.020	0.020	0.020	0.020	0.020	1.31
11	12.666	1.051	1095.27	1433.2	551.1	92.0	1.003	0.962	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.88
12	13.000	1.051	1095.22	1432.5	550.8	92.0	1.006	0.964	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.56
13	13.333	1.053	1097.05	1431.8	551.4	91.9	1.012	0.967	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.28
14	13.666	1.055	1098.38	1432.1	552.2	91.9	1.016	0.969	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.18
16	14.000	1.046	1090.53	1432.6	548.8	91.9	1.021	0.980	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.07
20	14.333	1.051	1094.83	1433.1	550.9	92.0	1.027	0.981	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.07
21	14.666	1.054	1097.45	1432.6	552.3	92.0	1.037	0.987	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.07
22	15.000	1.054	1097.40	1432.3	551.7	92.1	1.049	0.996	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.01
24	15.333	1.049	1093.25	1432.5	550.0	91.8	1.061	1.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.01
25	15.666	1.049	1093.79	1432.0	550.0	92.0	1.069	1.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.07
26	16.000	1.051	1095.22	1432.5	550.9	92.0	1.100	1.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.08
27	16.333	1.054	1097.79	1432.7	552.1	92.0	1.132	1.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.18
28	16.666	1.054	1097.59	1432.3	551.8	92.0	1.173	1.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.18
30	17.000	1.051	1095.22	1432.1	550.7	92.0	1.199	1.111	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.16
31	17.333	1.056	1094.14	1433.7	550.8	92.1	1.195	1.109	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.28
32	17.666	1.052	1095.77	1433.4	551.4	92.0	1.214	1.121	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.28
33	18.000	1.054	1097.64	1431.6	551.5	92.2	1.202	1.111	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.18
35	18.333	1.047	1091.62	1433.4	549.6	92.0	1.031	0.987	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.07
36	18.666	1.047	1091.42	1433.2	549.6	92.0	1.018	0.977	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.04
37	19.000	1.050	1094.58	1433.2	550.8	92.0	1.029	0.983	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.04

TEST PART		ALFA		WING		Y		PUN SURVEY		DATE		AEDC PROPULSION WIND TUNNEL					
TC-484		111		3.000		0.08		40		2- 3-77		TRANSBASIC 05					
POINT	X	M	VA	PT	Q	TT	ML	VNL/VM	PTL/PT	CPL	UL/VM	VL/VM	WL/VM	ARL	SWL		
11	10.333	1.099	1135.68	1420.3	563.2	91.9	1.161	1.044	0.997	-0.092	1.044	0.000	0.003	0.16	0.02		
12	10.666	1.099	1135.89	1422.2	564.0	92.0	1.152	1.038	0.997	-0.079	1.038	0.002	0.003	0.18	0.10		
13	11.000	1.099	1135.88	1420.5	563.3	92.0	1.127	1.020	0.998	-0.042	1.020	0.006	0.006	-0.07	0.33		
14	11.333	1.101	1137.26	1421.1	564.1	92.0	1.064	0.973	0.998	0.052	0.973	0.012	0.012	-0.72	0.72		
15	11.666	1.103	1138.54	1421.7	564.8	92.0	1.026	0.943	0.998	0.113	0.942	0.014	0.014	-1.14	0.83		
16	12.000	1.105	1140.21	1422.5	565.8	92.0	1.034	0.948	0.999	0.104	0.947	0.014	0.023	-1.41	0.82		
17	12.333	1.104	1139.89	1421.4	565.2	92.0	1.030	0.945	1.001	0.112	0.944	0.012	0.025	-1.54	0.75		
18	12.666	1.105	1140.27	1419.6	564.7	92.0	1.037	0.942	1.000	0.117	0.942	0.011	0.026	-1.61	0.66		
21	13.000	1.099	1135.29	1417.7	562.7	92.0	1.026	0.946	1.001	0.110	0.945	0.009	0.026	-1.80	0.54		
22	13.333	1.099	1135.71	1421.0	563.4	92.0	1.029	0.948	1.001	0.105	0.947	0.007	0.026	-1.60	0.40		
23	13.666	1.100	1136.27	1420.5	563.5	92.0	1.040	0.955	1.001	0.091	0.955	0.005	0.025	-1.49	0.29		
24	14.000	1.101	1136.98	1419.9	563.5	92.0	1.056	0.967	1.001	0.067	0.967	0.004	0.022	-1.30	0.22		
25	14.333	1.103	1138.71	1420.6	564.4	92.0	1.073	0.978	1.001	0.045	0.978	0.002	0.019	-1.09	0.11		
28	14.666	1.098	1134.74	1419.8	562.6	92.0	1.083	0.989	1.001	0.023	0.989	0.001	0.014	-0.81	0.04		
29	15.000	1.098	1135.30	1421.4	563.3	92.2	1.089	0.993	1.000	0.013	0.993	0.001	0.010	-0.60	0.04		
30	15.333	1.100	1136.26	1421.1	563.6	92.2	1.105	1.004	1.000	-0.007	1.004	0.000	0.007	-0.40	0.01		
31	15.666	1.102	1138.25	1422.8	565.1	92.0	1.117	1.011	0.998	-0.023	1.011	0.000	0.003	-0.16	0.01		
33	16.000	1.104	1139.78	1422.7	565.6	92.2	1.133	1.021	0.999	-0.042	1.021	0.001	0.000	0.01	0.06		
34	16.333	1.098	1134.56	1421.1	563.0	92.1	1.131	1.024	1.000	-0.048	1.024	0.003	0.006	0.32	0.18		
35	16.666	1.099	1135.73	1420.0	563.0	92.1	1.144	1.033	1.000	-0.066	1.033	0.005	0.010	0.54	0.26		
36	17.000	1.101	1137.74	1421.5	564.4	92.1	1.163	1.045	0.998	-0.091	1.044	0.004	0.016	0.88	0.23		
37	17.333	1.103	1139.31	1421.7	565.1	92.0	1.183	1.057	0.998	-0.115	1.056	0.004	0.024	1.29	0.22		
39	17.666	1.101	1137.85	1420.7	564.1	92.2	1.198	1.069	0.996	-0.141	1.068	0.006	0.032	1.73	0.20		
40	18.000	1.100	1136.88	1421.6	564.0	92.2	1.215	1.082	0.995	-0.166	1.081	0.008	0.040	2.14	0.40		
41	18.333	1.102	1138.22	1420.0	563.9	92.3	1.223	1.086	0.992	-0.177	1.085	0.010	0.047	2.48	0.53		
42	18.666	1.104	1140.07	1421.4	565.2	92.3	1.228	1.087	0.991	-0.181	1.086	0.014	0.051	2.68	0.73		
43	19.000	1.100	1136.81	1422.1	564.2	92.3	1.187	1.062	0.990	-0.134	1.062	0.017	0.013	0.68	0.89		

TEST PART REX10-6 ALPHA WING Y 2 RUN SURVEY DATE 2-3-77 AEDC PROPELLSION WIND TUNNEL
TC-484 112 2.997 0.08 48 3.00 -1.00 3-2

POINT	X	M	VM	PT	0	TT	ML	VL/VH	PTL/PT	CPL	UL/VH	VL/VH	WL/VH	ABL	SWL
3	10.333	1.103	1138.99	1418.7	563.8	92.0	1.163	1.043	0.998	-0.008	1.043	0.001	0.003	0.14	0.08
7	10.666	1.101	1137.76	1422.0	564.6	92.2	1.146	1.032	0.997	-0.007	1.032	0.006	0.000	0.00	0.36
8	11.000	1.098	1135.14	1421.9	563.5	92.1	1.055	0.968	0.998	0.001	0.968	0.019	-0.008	-0.48	1.14
9	11.333	1.098	1135.15	1421.3	563.3	92.1	1.013	0.936	0.999	0.128	0.935	0.026	-0.016	-0.96	1.57
10	11.666	1.099	1135.76	1420.0	563.0	92.1	1.013	0.935	1.001	0.131	0.935	0.028	-0.024	-1.46	1.72
11	12.000	1.102	1138.19	1423.5	565.4	92.1	1.014	0.934	1.000	0.132	0.933	0.027	-0.033	-2.02	1.64
12	12.333	1.101	1137.49	1421.6	564.4	92.0	1.010	0.932	1.002	0.140	0.930	0.022	-0.039	-2.40	1.35
13	12.666	1.103	1138.76	1420.7	564.5	92.0	1.008	0.929	1.001	0.143	0.928	0.015	-0.041	-2.54	0.95
14	13.000	1.104	1139.83	1419.6	564.5	92.1	1.010	0.930	1.001	0.143	0.929	0.010	-0.041	-2.54	0.64
15	13.333	1.098	1134.77	1421.1	563.0	92.2	1.013	0.936	1.000	0.128	0.935	0.006	-0.039	-2.38	0.35
16	13.666	1.098	1135.11	1421.4	563.3	92.1	1.017	0.939	1.001	0.123	0.939	0.002	-0.035	-2.15	0.13
17	14.000	1.099	1136.02	1420.6	563.4	92.1	1.021	0.941	1.000	0.118	0.941	0.000	-0.032	-1.93	0.02
18	14.333	1.102	1137.84	1421.5	564.5	92.0	1.034	0.950	1.000	0.100	0.949	0.000	-0.028	-1.88	0.01
19	14.666	1.102	1138.16	1420.9	564.3	92.0	1.048	0.960	1.000	0.081	0.954	-0.001	-0.024	-1.44	-0.03
20	15.000	1.104	1139.68	1421.0	565.0	91.9	1.062	0.969	1.000	0.062	0.959	-0.001	-0.020	-1.16	-0.06
22	15.333	1.102	1138.10	1420.4	564.1	92.0	1.081	0.984	0.999	0.030	0.984	-0.002	-0.015	-0.97	-0.02
23	15.666	1.099	1135.92	1420.6	563.4	92.0	1.082	0.987	0.999	0.025	0.987	0.001	-0.010	-0.60	0.04
24	16.000	1.101	1137.56	1420.7	564.0	92.0	1.112	1.008	0.998	-0.017	1.008	0.001	-0.005	-0.29	0.05
25	16.333	1.103	1139.19	1421.0	564.7	92.2	1.151	1.034	0.997	-0.071	1.034	-0.001	0.005	0.29	-0.05
28	16.666	1.097	1133.97	1419.0	562.0	92.0	1.169	1.052	0.998	-0.105	1.052	0.001	0.002	1.20	0.06
29	17.000	1.099	1135.55	1421.5	563.5	92.1	1.200	1.072	0.997	-0.146	1.072	0.002	0.030	2.09	0.10
30	17.333	1.100	1136.85	1419.6	563.2	92.2	1.216	1.082	0.994	-0.169	1.080	0.006	0.052	2.75	0.31
31	17.666	1.103	1139.15	1422.6	565.3	92.3	1.232	1.091	0.992	-0.187	1.089	0.005	0.064	3.35	0.39
32	18.000	1.103	1139.48	1421.2	564.9	92.2	1.229	1.088	0.989	-0.185	1.087	0.012	0.051	3.24	0.65
33	18.333	1.100	1136.29	1421.4	563.7	92.2	1.174	1.054	0.989	-0.118	1.053	0.018	0.015	0.84	0.97
34	18.666	1.101	1137.08	1421.4	564.1	92.1	1.054	0.966	0.990	0.056	0.965	0.019	0.000	0.03	1.13
35	19.000	1.102	1138.01	1420.4	564.0	92.3	1.090	0.991	1.000	0.017	0.991	0.018	-0.002	-0.12	1.07

TEST PART HEX10-6 ALPHA WING Y 2 RUN SURVEY DATE AEDC PROPELLANT WIND TUNNEL
 TC-484 114 2.997 0.08 49 3.00 -2.00 3-1 2-3-77 TRANSONIC 4T

POINT	X	M	VP	PT	O	TT	ML	VML/VH	PTL/PT	CPL	UL/VH	VL/VH	WL/VH	AIL	SWL
6	10.333	1.146	1174.69	1412.5	574.2	92.1	1.199	1.036	0.994	-0.078	1.036	-0.000	0.004	0.21	-0.02
7	10.666	1.148	1175.93	1414.2	575.3	92.1	1.199	1.035	0.994	-0.075	1.035	0.001	0.003	0.17	0.03
8	11.000	1.149	1176.52	1413.5	575.2	92.1	1.194	1.031	0.994	-0.067	1.031	0.002	0.002	0.12	0.10
9	11.333	1.151	1178.13	1413.5	575.7	92.1	1.186	1.024	0.994	-0.054	1.024	0.004	-0.001	-0.07	0.23
10	11.666	1.151	1177.89	1413.2	575.6	92.0	1.127	0.984	0.986	0.027	0.984	0.015	-0.018	-1.05	0.85
11	12.000	1.151	1178.62	1413.7	576.0	92.1	1.116	0.977	0.999	0.045	0.976	0.014	-0.022	-1.31	0.84
12	12.333	1.152	1179.00	1413.9	576.2	92.0	1.120	0.978	0.999	0.044	0.977	0.012	-0.024	-1.42	0.69
13	12.666	1.153	1179.81	1413.7	576.4	92.0	1.124	0.980	0.999	0.039	0.979	0.009	-0.025	-1.46	0.50
14	13.000	1.154	1180.68	1414.3	577.0	91.9	1.131	0.984	0.999	0.030	0.984	0.007	-0.025	-1.45	0.39
20	13.333	1.154	1180.43	1414.0	576.7	92.0	1.138	0.989	0.999	0.020	0.989	0.005	-0.024	-1.39	0.30
21	13.666	1.154	1180.33	1414.5	577.0	91.7	1.142	0.992	0.998	0.015	0.991	0.003	-0.023	-1.35	0.16
22	14.000	1.154	1181.01	1412.6	576.3	92.0	1.146	0.994	0.998	0.009	0.994	0.001	-0.021	-1.19	0.07
24	14.333	1.152	1178.54	1413.8	576.3	92.1	1.153	1.001	0.999	-0.003	1.000	0.001	-0.018	-1.03	0.05
25	14.666	1.153	1180.04	1415.6	577.2	92.1	1.151	0.999	0.999	0.000	0.999	0.000	-0.016	-0.93	0.02
26	15.000	1.153	1179.58	1413.0	576.0	92.0	1.150	1.003	0.999	-0.008	1.003	-0.001	-0.013	-0.73	-0.05
27	15.333	1.155	1181.42	1412.6	576.4	92.1	1.164	1.008	0.997	-0.019	1.008	-0.001	-0.009	-0.49	-0.07
29	15.666	1.151	1178.27	1415.2	576.4	92.2	1.174	1.016	0.996	-0.035	1.016	-0.000	-0.004	-0.23	-0.01
30	16.000	1.151	1178.27	1413.4	575.7	92.3	1.177	1.018	0.997	-0.039	1.018	-0.001	-0.002	-0.13	-0.04
31	16.333	1.152	1178.77	1413.2	575.9	92.0	1.165	1.022	0.996	-0.049	1.022	-0.001	0.001	0.07	-0.05
32	16.666	1.154	1180.47	1414.1	576.8	92.0	1.197	1.029	0.995	-0.063	1.029	-0.000	0.006	0.36	-0.02
33	17.000	1.155	1181.25	1414.7	577.2	92.1	1.204	1.033	0.994	-0.072	1.033	0.000	0.011	0.63	0.00
34	17.333	1.153	1179.71	1414.4	576.6	92.2	1.213	1.040	0.994	-0.086	1.040	0.000	0.018	1.01	0.01
35	17.666	1.150	1177.65	1412.7	575.2	92.2	1.221	1.048	0.993	-0.102	1.048	0.001	0.027	1.50	0.07
36	18.000	1.152	1178.77	1414.1	576.2	92.0	1.234	1.055	0.991	-0.118	1.054	-0.001	0.038	2.06	-0.05
37	18.333	1.153	1179.80	1414.4	576.7	92.0	1.247	1.063	0.988	-0.135	1.062	0.002	0.048	2.60	0.08
38	18.666	1.153	1179.88	1412.1	575.8	92.0	1.255	1.068	0.987	-0.146	1.066	0.006	0.054	2.91	0.32
41	19.000	1.150	1177.05	1414.1	575.7	91.9	1.254	1.070	0.985	-0.152	1.068	0.011	0.056	3.00	0.59

TEST PART REX10-6 ALPHA WING Y Z RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL
 JC-484 115 3.002 0.08 48 3.00 -1.00 3c 2 2-3-77 TRANSONIC 41

POINT	X	M	VM	PT	Q	TT	KL	VHL/VN	PTL/PT	CPL	UL/VN	VL/VN	ML/VN	AAL	SWL
8	10.333	1.151	1179.33	1414.2	576.1	92.0	1.201	1.034	0.993	-0.074	1.034	-0.000	0.003	0.18	-0.01
9	10.666	1.153	1179.58	1413.4	576.2	92.0	1.199	1.032	0.994	-0.069	1.032	0.001	0.003	0.16	0.05
10	11.000	1.155	1181.22	1413.7	576.8	92.1	1.175	1.014	0.993	-0.035	1.014	0.011	-0.004	-0.23	0.60
11	11.333	1.152	1179.14	1413.6	576.1	92.0	1.092	0.958	0.995	0.079	0.958	0.026	-0.019	-1.12	1.57
12	11.666	1.151	1178.75	1413.1	575.8	92.1	1.084	0.953	1.000	0.095	0.952	0.028	-0.029	-1.73	1.68
13	12.000	1.153	1180.24	1413.8	576.6	92.0	1.090	0.956	1.000	0.099	0.955	0.024	-0.037	-2.23	1.41
14	12.333	1.154	1180.28	1414.8	577.0	92.0	1.093	0.958	0.999	0.084	0.957	0.016	-0.042	-2.50	0.96
16	12.666	1.154	1180.72	1412.2	576.1	91.9	1.102	0.964	0.999	0.071	0.963	0.007	-0.043	-2.57	0.45
17	13.000	1.152	1179.34	1414.5	576.4	92.0	1.109	0.970	0.999	0.060	0.969	0.003	-0.042	-2.47	0.20
18	13.333	1.152	1179.46	1413.4	576.2	92.0	1.117	0.976	0.998	0.047	0.975	0.001	-0.039	-2.28	0.03
19	13.666	1.154	1180.21	1413.1	576.4	91.8	1.129	0.983	0.997	0.031	0.982	-0.002	-0.034	-2.00	-0.09
21	14.000	1.154	1181.03	1414.0	576.9	92.0	1.140	0.990	0.997	0.017	0.990	-0.003	-0.029	-1.71	-0.15
22	14.333	1.151	1178.35	1413.4	575.8	92.0	1.132	0.987	0.997	0.023	0.987	-0.002	-0.027	-1.54	-0.10
23	14.666	1.152	1179.00	1414.4	576.4	92.0	1.145	0.995	0.997	0.006	0.995	-0.002	-0.022	-1.28	-0.14
24	15.000	1.152	1179.36	1413.4	576.1	92.0	1.160	1.005	0.996	-0.014	1.005	-0.004	-0.016	-0.30	-0.20
25	15.333	1.154	1180.32	1413.3	576.4	92.0	1.176	1.016	0.996	-0.035	1.016	-0.004	-0.009	-0.51	-0.25
27	15.666	1.149	1176.91	1412.6	575.0	92.0	1.179	1.020	0.996	-0.044	1.020	-0.003	-0.004	-0.24	-0.15
28	16.000	1.150	1177.63	1413.8	575.7	92.0	1.187	1.025	0.995	-0.055	1.025	-0.002	0.003	0.19	-0.13
29	16.333	1.151	1178.21	1413.3	575.7	92.0	1.205	1.037	0.995	-0.076	1.037	-0.003	0.014	0.77	-0.17
30	16.666	1.152	1178.23	1412.9	575.9	92.0	1.217	1.043	0.994	-0.092	1.043	-0.004	0.022	1.20	-0.23
31	17.000	1.154	1180.53	1414.0	576.8	92.0	1.230	1.051	0.991	-0.110	1.051	-0.004	0.034	1.84	-0.22
33	17.333	1.149	1177.10	1413.5	575.4	92.1	1.246	1.065	0.990	-0.138	1.064	-0.002	0.049	2.65	-0.13
34	17.666	1.152	1179.40	1412.8	575.9	92.1	1.259	1.071	0.986	-0.153	1.069	-0.003	0.061	3.26	-0.01
35	18.000	1.153	1180.34	1412.9	576.2	92.1	1.266	1.075	0.982	-0.163	1.073	0.000	0.065	3.46	0.15
36	18.333	1.153	1180.31	1414.4	576.8	92.1	1.260	1.071	0.982	-0.157	1.070	0.012	0.058	3.11	0.03
38	18.666	1.151	1178.20	1413.5	575.8	92.1	1.094	0.960	0.982	0.059	0.960	0.017	-0.010	-0.60	1.03
39	19.000	1.151	1178.48	1413.2	575.7	92.2	1.121	0.980	0.998	0.039	0.979	0.017	-0.006	-0.35	0.99

TEST PART REFNO-6 ALPHA KING Y Z PUN SURVEY DATE AEDC PROPULSION WIND TUNNEL TRANSONIC 42

TC-464 924 3.000 5.01 45 4.00 -1.00 4-901 2-7-77

POINT	Y	X	VP	PT	Q	TT	PL	VNL/VH	DIL/PT	CP2	UL/VH	VL/VH	WL/VH	ABL	EWL
20	11.000	0.651	906.34	1484.3	471.9	40.7	0.826	0.974	1.000	0.053	0.968	0.032	0.105	6.19	1.90
21	11.426	0.652	907.15	1495.0	472.6	40.7	0.804	0.954	1.000	0.050	0.948	0.048	0.103	6.23	2.90
22	12.333	0.653	907.63	1485.3	473.3	40.6	0.787	0.932	1.000	0.136	0.925	0.070	0.088	5.46	4.31
23	13.000	0.654	908.04	1497.1	473.9	40.7	0.772	0.916	1.000	0.166	0.911	0.081	0.053	3.31	5.10
24	13.666	0.650	904.90	1493.1	476.7	40.7	0.778	0.925	1.001	0.151	0.922	0.069	0.023	1.45	4.31
25	14.333	0.652	907.67	1494.7	472.5	40.7	0.802	0.949	1.001	0.103	0.947	0.055	0.014	0.82	3.35
26	15.000	0.654	906.91	1493.6	473.3	40.8	0.829	0.974	1.001	0.054	0.973	0.044	0.014	0.82	2.57
27	15.666	0.651	906.24	1486.4	472.3	40.9	0.848	0.987	1.001	0.009	0.986	0.038	0.021	1.19	2.18
28	16.333	0.654	908.99	1493.7	473.4	40.5	0.867	1.013	1.001	-0.024	1.012	0.034	0.031	1.74	1.94
29	17.000	0.653	907.70	1490.4	471.4	40.3	0.875	1.072	1.002	-0.041	1.021	0.035	0.047	2.65	1.98
30	17.666	0.653	907.79	1489.8	471.4	40.6	0.855	1.003	1.002	-0.001	1.000	0.040	0.053	3.04	2.27
31	18.333	0.646	903.43	1490.8	469.2	40.5	0.832	0.983	1.001	0.035	0.981	0.042	0.042	2.44	2.46
40	19.000	0.651	906.34	1481.0	470.9	40.8	0.839	0.987	1.002	0.029	0.986	0.044	0.035	2.03	2.56

TEST PART		PERIOD		ALPHA		WIND		PUN SURVEY		DATE		AIRC PROPUSSION WIND TUNNEL							
TC-484		926		3,000		-5.00		48		4-901		2-7-77		TRANSONIC 48					
POINT	X	Y	Z	W	V _u	PT	Q	TT	PL	VNI/VN	PTL/PT	CPL	UL/VN	VL/VN	WL/VN	ABL	SUL		
8	11.000	0.450		905.21	1496.8	471.7	41.0	0.889	1.040	1.000	1.000	-0.081	1.038	0.005	-0.072	-3.98	0.27		
9	11.666	0.452		906.79	1495.2	472.5	40.7	0.866	1.015	1.001	1.001	-0.029	1.004	-0.002	-0.148	-8.39	-0.11		
10	12.333	0.453		907.79	1491.4	472.0	40.4	0.892	1.040	1.000	1.000	-0.080	1.025	-0.027	-0.175	-9.68	-1.31		
11	13.000	0.455		910.14	1493.1	473.9	40.6	0.905	1.134	0.994	0.994	-0.294	1.123	-0.092	-0.167	-8.49	-4.78		
13	13.666	0.448		908.57	1490.7	472.5	41.1	1.052	1.227	1.000	1.000	-0.463	1.217	-0.127	-0.092	-4.31	-5.97		
14	14.333	0.450		904.99	1495.6	472.3	40.7	1.066	1.212	1.002	1.002	-0.427	1.207	-0.101	-0.027	-1.29	-4.08		
15	15.000	0.453		904.25	1492.6	472.3	41.2	1.018	1.163	1.001	1.001	-0.328	1.161	-0.067	-0.007	-0.35	-3.31		
16	15.666	0.452		907.44	1496.1	472.4	41.0	0.979	1.127	1.001	1.001	-0.255	1.126	-0.050	0.001	0.05	-2.34		
19	16.333	0.452		907.50	1497.5	473.6	40.8	0.937	1.095	1.001	1.001	-0.170	1.084	-0.044	0.010	0.52	-2.23		
20	17.000	0.452		907.60	1495.8	473.0	41.0	0.923	1.072	1.001	1.001	-0.142	1.071	-0.042	0.024	1.27	-2.26		
21	17.666	0.454		906.94	1495.9	474.1	40.7	0.886	1.033	1.001	1.001	-0.065	1.032	-0.037	0.028	1.58	-2.07		
22	18.333	0.452		907.49	1494.8	472.7	40.9	0.842	0.996	1.000	1.000	0.021	0.999	-0.033	0.012	0.71	-1.90		
23	19.000	0.454		906.34	1496.3	474.4	41.1	0.841	0.966	1.000	1.000	0.029	0.986	-0.031	-0.000	-0.01	-1.02		

PAGE 1 AIRCRAFT FORCE, MOMENT

TEST PART M PT RT 10-6 VM 0 TT WING RUN SURVEY
 IC-466 73 0.700 1430.4 1005.3 2.997 855.9 449.3 78.8 40 3 1 ASDC PROPELLER WIND TUNNEL
 TRANSONIC 47

ALFA	CFR	CV	CFR	CLPF	CLW	CLL	CAB
-5.01	-0.4535	-0.0014	0.0107	-0.0353	-0.0002	0.0030	0.0101
-1.90	-0.1723	-0.0010	0.0162	-0.0137	-0.0002	0.0029	0.0101
-0.01	-0.0012	-0.0004	0.0178	0.0016	-0.0002	0.0027	0.0099
2.02	0.1765	-0.0006	0.0148	0.0177	-0.0002	0.0030	0.0099
5.02	0.4740	-0.0007	0.0080	0.0398	-0.0003	0.0020	0.0100

PAGE 3 SUMMARY PRESSURES

AIRC PROPULSION WIND TUNNEL
TRANSONIC AT

TEST CASE 73 0.700 1930.0 1005.2 2.997 355.9 442.3 70.0 43 2 1

PRESSURE COEFFICIENTS CP80798-P.3/0

COEFFICIENT	ALPHA=1.00	ALPHA=0.01	ALPHA=2.02	ALPHA=5.02
1 CP8 12	0.1101	0.0314	0.0033	-0.0349
2 CP8 22	0.0704	-0.0394	-0.0029	-0.0944
3 CP8 32	-0.0322	-0.0701	-0.1076	-0.1324
4 CP8 42	-0.0786	-0.1240	-0.1379	-0.1529
5 CP8 52	-0.0899	-0.1194	-0.1257	-0.1320
6 CP8 62	-0.0315	-0.0613	-0.0551	-0.0701
7 CP8 72	-0.0348	-0.0640	-0.0577	-0.0708
8 CP8 82	0.0291	-0.0175	-0.0288	-0.0473
9 CP8 92	0.0505	-0.0066	-0.0299	-0.0690
10 CP8 102	0.0942	0.0414	-0.0379	-0.1019
11 CP8 112	0.0972	0.0301	-0.0117	-0.1519
12 CP8 122	0.0977	0.0217	-0.0729	-0.1509
13 CP8 132	0.0693	0.0270	-0.0414	-0.1706
14 CP8 142	0.0424	-0.0216	-0.0416	-0.1612
15 CP8 152	0.0346	-0.0222	-0.0371	-0.1545
16 CP8 162	0.0244	-0.0249	-0.0340	-0.1295
17 CP8 172	0.0141	-0.0251	-0.0467	-0.1001
18 CP8 182	0.0157	-0.0130	-0.0283	-0.0641
19 CP8 192	0.0250	0.0040	-0.0137	-0.0263
20 CP8 202	0.0253	0.1111	0.0053	-0.0070
21 CP8 212	0.0217	0.1100	0.0033	-0.0070
22 CP8 222	0.0139	0.0057	0.0004	-0.0017
23 CP8 232	0.0126	0.0040	0.0013	-0.0004
24 CP8 242	0.0048	-0.0023	-0.0003	-0.0070
25 CP8 252	-0.0035	-0.0040	-0.0014	-0.0040

PAGE 1 AIRCRAFT FORCE, MOMENT

AEDC PROPELLION WIND TUNNEL
TRANSONIC 45

WING ROW SURVEY
3 1

TT 92.3

0 473.4

906.5

3.001

1501.6

PT 1301.6

CHP 0.4792

ALPA -5.01

TEST	IC-404	74	0.890	1501.6	PT	P	906.5	473.4	0	TT	WING	ROW	SURVEY	3	1	CLW	CLL	CAB
CHP	0.4792	-0.0021	0.0109	-0.0334	CLW	-0.0002	0.0029	0.0101										
CLW	-0.1793	-0.0014	0.0159	-0.0135	CLW	-0.0002	0.0029	0.0101										
CLL	-0.0034	-0.0014	0.0179	-0.0019	CLL	-0.0002	0.0029	0.0101										
CAB	0.1804	-0.0013	0.0153	0.0174	CAB	-0.0002	0.0029	0.0101										
ALPA	5.02	0.4843	-0.0008	0.0379	ALPA	-0.0003	0.0029	0.0101										

PAGE 2 SUMMARY PRESSURES

AFDC PROPULSION WIND TUNNEL
TRANSONIC AT

TEST PART W PT P RE-10-6 VM 0 TT WING ROW SURVEY
TC-404 74 0.050 1501.6 936.5 3.001 906.5 473.4 92.2 49 3 1

PRESSURE COEFFICIENTS CP80(P8-D.3)/Q

SP171CF	ALFA=5.01	ALFA=1.99	ALFA=0.01	ALFA=2.02	ALFA=5.02
1 CP8 1a	0.1193	0.0667	0.0405	0.0114	-0.0295
2 CP8 2a	0.0339	-0.0130	-0.0367	-0.0536	-0.0928
3 CP8 3a	-0.0322	-0.0742	-0.0918	-0.1101	-0.1343
4 CP8 4a	-0.0833	-0.1191	-0.1314	-0.1429	-0.1571
5 CP8 5a	-0.0806	-0.1170	-0.1249	-0.1299	-0.1343
6 CP8 6a	-0.0315	-0.0552	-0.0595	-0.0619	-0.0638
7 CP8 7a	-0.0330	-0.0578	-0.0618	-0.0604	-0.0604
8 CP8 8a	0.0346	-0.0704	-0.0116	-0.0202	-0.0326
9 CP8 9a	0.0495	0.0217	0.0017	-0.0183	-0.0339
10 CP8 10a	0.1123	0.0409	0.0179	-0.0193	-0.0903
11 CP8 11a	0.1058	0.0373	-0.0036	-0.0532	-0.1312
12 CP8 12a	0.1037	0.0274	-0.0175	-0.0705	-0.1789
13 CP8 13a	0.0792	0.0051	-0.0382	-0.0916	-0.1931
14 CP8 14a	0.0697	-0.0013	-0.0431	-0.0909	-0.1798
15 CP8 15a	0.0380	-0.0245	-0.0610	-0.1014	-0.1726
16 CP8 16a	0.0293	-0.0102	-0.0593	-0.0918	-0.1436
17 CP8 17a	0.0137	-0.0312	-0.0528	-0.0739	-0.1084
18 CP8 18a	0.0147	-0.0171	-0.0314	-0.0423	-0.0846
19 CP8 19a	0.0287	0.0047	-0.0023	-0.0065	-0.0204
20 CP8 20a	0.0317	0.0182	0.0128	0.0183	0.0017
21 CP8 21a	0.0285	0.0166	0.0136	0.0137	0.0006
22 CP8 22a	0.0166	0.0101	0.0091	0.0097	0.0006
23 CP8 23a	0.0173	0.0078	0.0069	0.0087	0.0051
24 CP8 24a	0.0090	0.0002	-0.0013	0.0000	-0.0079
25 CP8 25a	-0.0313	-0.0384	-0.0386	-0.0366	-0.0400

PAGE 1 SUMMARY FORCE, MONKEY

TEST	PART	"	PT	P	PR010-0	VM	0	TT	WIND	HOW	SURVEY	AEDC	PROPULSION	WIND	TUNNEL
TC-004	75	0.000	1073.0	072.1	2.999	954.3	403.0	94.7	40	3	1		TRANSONIC	42	
ALPHA	0.007	0.014	0.021	0.011	0.024	0.002	0.002	0.034	0.009						
-2.00	-0.004	-0.013	-0.016	-0.011	-0.026	-0.003	-0.003	0.030	0.005						
0.01	0.002	0.012	0.012	0.012	0.014	0.002	0.002	0.028	0.001						
2.00	0.003	0.016	0.016	0.016	0.016	0.002	0.002	0.028	0.003						
3.01	0.003	-0.013	0.007	0.007	0.030	-0.003	-0.003	0.029	0.004						

PAGE 2 SUMMARY PRESSURES

AEDC PROPELLSION WIND TUNNEL
TRANSONIC 42

TEST PART " BT P MP10-6 VM 0 TT WIND RUN SURVEY
TC-404 75 0.889 1473.9 972.1 2.998 954.3 493.8 84.7 48 3 1

PRESSURE COEFFICIENTS CDB(CPS-P J/Q)

OFFICER	ALPMA-5.00	ALPMA-2.00	ALPMA 0.01	ALPMA 2.02	ALPMA 5.01
1 CPS 1a	0.1295	0.0718	0.0490	0.0133	-0.0258
2 CPS 2a	0.0304	-0.0142	-0.0342	-0.0636	-0.0948
3 CPS 3a	-0.0373	-0.0826	-0.0987	-0.1227	-0.1452
4 CPS 4a	-0.0923	-0.1361	-0.1455	-0.1641	-0.1736
5 CPS 5a	-0.0986	-0.1357	-0.1391	-0.1486	-0.1444
6 CPS 6a	-0.0315	-0.0606	-0.0603	-0.0697	-0.0684
7 CPS 7a	-0.0295	-0.0586	-0.0582	-0.0591	-0.0487
8 CPS 8a	0.0436	-0.0432	-0.0037	-0.0146	-0.0147
9 CPS 9a	0.0277	0.0292	0.0127	-0.0102	-0.0314
10 CPS 10a	0.1265	0.0401	0.0302	-0.0114	-0.0719
11 CPS 11a	0.1277	0.0472	0.0084	-0.0500	-0.1442
12 CPS 12a	0.1194	0.0353	-0.0108	-0.0740	-0.1836
13 CPS 13a	0.1016	0.0090	-0.0364	-0.1028	-0.2203
14 CPS 14a	0.0765	-0.0007	-0.0455	-0.1102	-0.2305
15 CPS 15a	0.0445	-0.0297	-0.0702	-0.1290	-0.2519
16 CPS 16a	0.0242	-0.0416	-0.0750	-0.1325	-0.1989
17 CPS 17a	0.0064	-0.0455	-0.0696	-0.0975	-0.1238
18 CPS 18a	0.0120	-0.0265	-0.0374	-0.0514	-0.0636
19 CPS 19a	0.0319	0.0068	0.0032	-0.0043	-0.0101
20 CPS 20a	0.0400	0.0276	0.0218	0.0180	0.0147
21 CPS 21a	0.0380	0.0226	0.0240	0.0204	0.0198
22 CPS 22a	0.0295	0.0153	0.0179	0.0153	0.0149
23 CPS 23a	0.0254	0.0115	0.0137	0.0107	0.0113
24 CPS 24a	0.0195	0.0026	0.0044	0.0010	0.0012
25 CPS 25a	-0.0242	-0.0368	-0.0334	-0.0362	-0.0373

PAGE 1 SUMMARY FORCE, MOMENT?

TEST	PART	W	WT	D	RF-10-6	VM	0	TT	WIND	RUN	SUPPLY	AEDC	PROPULSION	STNO	TUNNEL
TC-484	936	0.029	1443.3	0.032-0	3.000	970.6	408.0	79.6	40	3	1		TRANSONIC	42	
ALPHA															
	CMF		CY	CAP	CLMP	CLN	CLL	CAR							
-4.90	-0.3242	-0.0004	-0.0210	-0.0122	-0.0210	-0.0006	0.0043	0.0104							
-1.90	-0.1966	-0.0012	-0.0174	0.0174	-0.0124	-0.0002	0.0033	0.0094							
0.00	-0.0356	-0.0007	-0.0187	0.0187	0.0002	-0.0001	0.0029	0.0104							
0.00	-0.1921	-0.0008	-0.0165	0.0165	0.0002	-0.0001	0.0031	0.0090							
5.01	0.5400	-0.0007	0.0090	0.0090	0.0164	-0.0000	0.0061	0.0100							

PAGE 2 SUMMARY PRESSURES

TEST PART M DT P M2010-6 VM Q TT M206 OUT SURVEY
TC-084 030 0.922 1443.3 032.0 3.000 970.6 493.9 79.6 49 3 1 AEDC PROPELLSION WIND TUNNEL
TRANSONIC 4T

PRESSURE COEFFICIENTS CPM(PB-P)/Q

ORFICE	ALFMA-4.99	ALFMA-1.99	ALFMA 0.00	ALFMA 2.01	ALFMA 5.91
1 CPM 1a	0.1372	0.0990	0.0495	0.0266	-0.0150
2 CPM 2a	0.0338	-0.0030	-0.0399	-0.0365	-0.0924
3 CPM 3a	-0.0417	-0.0738	-0.1075	-0.1218	-0.1473
4 CPM 4a	-0.1064	-0.1354	-0.1661	-0.1724	-0.1871
5 CPM 5a	-0.1193	-0.1356	-0.1585	-0.1540	-0.1495
6 CPM 6a	-0.0406	-0.0511	-0.0456	-0.0493	-0.0502
7 CPM 7a	-0.0302	-0.0439	-0.0576	-0.0487	-0.0314
8 CPM 8a	0.0440	0.0186	-0.0026	-0.0016	-0.0032
9 CPM 9a	0.0840	0.0457	0.0150	0.0036	-0.0102
10 CPM 10a	0.1334	0.0742	0.0335	0.0032	-0.0492
11 CPM 11a	0.1347	0.0643	0.0086	-0.0374	-0.1250
12 CPM 12a	0.1047	0.0375	-0.0329	-0.0735	-0.1789
13 CPM 13a	0.0840	0.0246	-0.0387	-0.0645	-0.2067
14 CPM 14a	0.0787	0.0120	-0.0520	-0.1093	-0.2219
15 CPM 15a	0.0414	-0.0201	-0.0821	-0.1384	-0.2531
16 CPM 16a	0.0142	-0.0379	-0.0667	-0.1498	-0.2729
17 CPM 17a	-0.0046	-0.0461	-0.0943	-0.1262	-0.2857
18 CPM 18a	-0.0034	-0.0236	-0.0502	-0.0529	-0.0990
19 CPM 19a	0.0233	0.0184	0.0028	0.0060	0.0114
20 CPM 20a	0.0370	0.0366	0.0248	0.0248	0.0408
21 CPM 21a	0.0306	0.0396	0.0289	0.0337	0.0442
22 CPM 22a	0.0163	0.0320	0.0204	0.0262	0.0340
23 CPM 23a	0.0743	0.0750	0.0134	0.0184	0.0246
24 CPM 24a	0.0134	0.0152	0.0032	0.0076	0.0192
25 CPM 25a	-0.0292	-0.0247	-0.0389	-0.0310	-0.0310

PAGE 1 SUMMARY FORCE, MOMENT

TEST	PART	M	PT	P	PP10-6	VM	0	TT	WING	NOV	SURVEY	AEDC	PROPULSION	WING	TUNNEL
IC-484	76	0.050	1429.3	799.9	2.968	999.3	509.0	84.2	46	3	1		TRANSONIC	45	
ALPA	CNF	-0.5483	CT	CAF	CLUP	CLW	CLL	CAR							
-5.01	-0.5483	-0.0027	0.0194	0.0194	0.0014	-0.0002	0.0049	0.0102							
-1.08	-0.2088	-0.0013	0.0194	0.0194	-0.0023	-0.0003	0.0030	0.0101							
0.01	-0.0024	-0.0010	0.0194	0.0194	0.0032	-0.0002	0.0026	0.0107							
2.02	0.1996	-0.0011	0.0190	0.0190	0.0097	-0.0002	0.0029	0.0103							
5.02	0.5436	-0.0005	0.0142	0.0142	0.0093	-0.0004	0.0026	0.0106							

PAGE 2 SUMMARY PRESSURES

TEST PART 76 0.950 1420.3 799.0 2.000 999.1 505.0 84.2 45 1 1

WING HOW SURVEY

ATDC PROPELLSION WIND TUNNEL

TRANSONIC AT

PRESSURE COEFFICIENTS CP5M(PS-P)70

CP5M(PS-P)70	ALFA=5.01	ALFA=1.00	ALFA=0.01	ALFA=2.02	ALFA=5.02
1 CP5 10	0.1432	0.0923	0.0506	0.0296	-0.0003
2 CP5 20	0.0462	-0.0005	-0.0316	-0.0550	-0.0853
3 CP5 30	-0.0383	-0.0008	-0.1094	-0.1284	-0.1510
4 CP5 40	-0.1136	-0.1400	-0.1696	-0.1928	-0.1901
5 CP5 50	-0.1441	-0.1600	-0.2095	-0.2177	-0.2010
6 CP5 60	-0.0265	-0.0421	-0.0453	-0.0425	-0.0337
7 CP5 70	-0.0191	-0.0404	-0.0410	-0.0372	-0.0153
8 CP5 80	0.0573	0.0274	0.0107	0.0097	0.0214
9 CP5 90	0.1016	0.0533	0.0306	0.0193	0.0128
10 CP5 100	0.1517	0.0870	0.0494	0.0171	-0.0245
11 CP5 110	0.1478	0.0733	0.0244	-0.0237	-0.1023
12 CP5 120	0.1383	0.0506	0.0042	-0.0511	-0.1461
13 CP5 130	0.1080	0.0293	-0.0275	-0.0833	-0.1886
14 CP5 140	0.0916	0.0138	-0.0427	-0.1019	-0.2020
15 CP5 150	0.0500	-0.0225	-0.0777	-0.1370	-0.2337
16 CP5 160	0.0241	-0.0400	-0.1020	-0.1601	-0.2550
17 CP5 170	-0.0173	-0.0608	-0.1375	-0.1876	-0.2822
18 CP5 180	-0.0261	-0.0590	-0.1350	-0.1730	-0.2037
19 CP5 190	0.0145	0.0111	-0.0028	0.0007	-0.0748
20 CP5 200	0.0415	0.0400	0.0373	0.0441	0.0509
21 CP5 210	0.0502	0.0456	0.0318	0.0476	0.0668
22 CP5 220	0.0464	0.0374	0.0337	0.0386	0.0590
23 CP5 230	0.0403	0.0297	0.0242	0.0277	0.0429
24 CP5 240	0.0298	0.0177	0.0113	0.0130	0.0247
25 CP5 250	-0.0144	-0.0233	-0.0394	-0.0272	-0.0190

PAGE 1 SUMMARY FORCE, MOMENT

TEST	PART	W	PT	D	RF-10-6	VM	0	YT	WING RUN SURVEY	AEDC PROPULSION WIND TUNNEL
TC-484	936	0.976	1425.6	774.0	3.005	1020.5	516.5	91.6	48	TRANSONIC AT
ALFA	CLPF	CY	CAP	CLMP	CLW	CLL	CAB			
-5.01	-0.5559	-0.0017	0.0234	0.0139	-0.0001	0.0032	0.0096			
-1.94	-0.2210	-0.0015	0.0312	0.0049	-0.0002	0.0028	0.0106			
0.01	-0.0072	-0.0010	0.0279	0.0007	-0.0001	0.0024	0.0106			
2.02	0.2022	-0.0007	0.0266	0.0013	-0.0001	0.0028	0.0108			
5.02	0.5524	-0.0007	0.0268	-0.0116	-0.0002	0.0035	0.0100			

PAGE 2 SUMMARY PRESSURES

TEST TC-484

PT 0.976

PT 1025.6

PT 774.0

PT 3.005

PT 1020.5

PT 516.5

PT 01.6

PT 49

PT 3

PT 1

PT 1

PT 1

PT 1

PRESSURE COEFFICIENTS CP8=CP8-P.1/Q

DRIPICP	ALPHA=5.01	ALPHA=1.00	ALPHA=0.01	ALPHA=2.02	ALPHA=5.02
1 CP8 1a	0.1543	0.1044	0.0793	0.0468	0.0074
2 CP8 2a	0.0597	0.0094	-0.0169	-0.0435	-0.0770
3 CP8 3a	-0.0311	-0.0684	-0.0857	-0.1174	-0.1306
4 CP8 4a	-0.1176	-0.1460	-0.1659	-0.1846	-0.2031
5 CP8 5a	-0.1655	-0.1923	-0.2042	-0.2196	-0.2286
6 CP8 6a	-0.2305	-0.2474	-0.2482	-0.2478	-0.2407
7 CP8 7a	0.0190	-0.0160	-0.0226	-0.0237	-0.0309
8 CP8 8a	0.0931	0.0616	0.0541	0.0515	0.0569
9 CP8 9a	0.1265	0.0819	0.0648	0.0540	0.0439
10 CP8 10a	0.1737	0.1121	0.0797	0.0486	0.0062
11 CP8 11a	0.1685	0.0950	0.0498	0.0045	-0.0727
12 CP8 12a	0.1424	0.0655	0.0166	-0.0367	-0.1290
13 CP8 13a	0.1249	0.0487	-0.0037	-0.0630	-0.1602
14 CP8 14a	0.1061	0.0324	-0.0210	-0.0783	-0.1793
15 CP8 15a	0.0674	-0.0045	-0.0551	-0.1133	-0.2109
16 CP8 16a	0.0347	-0.0323	-0.0785	-0.1401	-0.2322
17 CP8 17a	-0.0040	-0.0710	-0.1156	-0.1700	-0.2590
18 CP8 18a	-0.0609	-0.1186	-0.1585	-0.2050	-0.2896
19 CP8 19a	-0.1067	-0.1304	-0.1604	-0.2210	-0.3151
20 CP8 20a	-0.0195	0.0236	0.0241	-0.0048	-0.0869
21 CP8 21a	0.0340	0.0579	0.0621	0.0620	0.0575
22 CP8 22a	0.0477	0.0552	0.0586	0.0645	0.0777
23 CP8 23a	0.0512	0.0442	0.0465	0.0515	0.0686
24 CP8 24a	0.0423	0.0310	0.0292	0.0313	0.0466
25 CP8 25a	-0.0061	-0.0121	-0.0144	-0.0142	-0.0031

PAGE 1 SUMMARY FORCE, MOMENT

APDC PROPULSION WIND TUNNEL
TRANSONIC 47

TEST PART M PT P RE-10-6 VM TT WIND RUN SURVEY
TC-004 74 1.002 1074.0 751.6 3.003 1046.1 520.2 03.0 40 3 1

ALPHA	CNF	CY	CAP	CLVP	CLW	CLL	CAB
-5.01	-0.5538	-0.0031	0.0243	0.0238	-0.0003	0.0028	0.0003
-1.94	-0.2187	-0.0016	0.0314	0.0076	-0.0003	0.0025	0.0105
0.01	-0.0088	-0.0014	0.0325	0.0033	-0.0003	0.0023	0.0108
2.02	0.2018	-0.0011	0.0306	-0.0013	-0.0003	0.0024	0.0106
5.00	0.5440	-0.0010	0.0267	-0.0153	-0.0005	0.0034	0.0086

PAGE 2 SUMMARY PRESSURES

AEDC PROPELLSION WIND TUNNEL
TRANSONIC 47

TEST PART W PT P P010-6 VM O TT WING SURVEY
TC-484 77 1,002 1476.0 791.6 3.003 1046.1 528.2 85.0 49 3 1

PRESSURE COEFFICIENTS C_{PS}(P_S-P₀) / P₀

ORIFICE	ALFA=5.01	ALFA=1.99	ALFA=0.01	ALFA=2.03	ALFA=5.00
1 CP8 18	0.1742	0.1253	0.0952	0.0453	0.0259
2 CP8 28	0.0744	0.0297	0.0044	-0.0206	-0.0509
3 CP8 38	-0.0111	-0.0488	-0.0715	-0.0721	-0.1199
4 CP8 48	-0.0974	-0.1274	-0.1444	-0.1819	-0.1838
5 CP8 58	-0.1482	-0.1772	-0.1897	-0.2037	-0.2151
6 CP8 68	-0.2186	-0.2365	-0.2405	-0.2442	-0.2399
7 CP8 78	-0.2144	-0.2228	-0.2193	-0.2146	-0.1911
8 CP8 88	-0.0975	-0.1402	-0.1301	-0.1096	0.0013
9 CP8 98	0.1597	0.0760	0.0541	0.0486	0.0676
10 CP8 108	0.2115	0.1461	0.1098	0.0911	0.0918
11 CP8 118	0.2092	0.1362	0.0927	0.0496	-0.0171
12 CP8 128	0.1864	0.1212	0.0735	0.0229	-0.0613
13 CP8 138	0.1645	0.0996	0.0401	-0.0143	-0.1041
14 CP8 148	0.1450	0.0708	0.0205	-0.0336	-0.1354
15 CP8 158	0.1025	0.0319	-0.0176	-0.0715	-0.1613
16 CP8 168	0.0895	0.0031	-0.0420	-0.0980	-0.1859
17 CP8 178	0.0745	-0.0368	-0.0800	-0.1319	-0.2163
18 CP8 188	-0.0242	-0.0792	-0.1212	-0.1682	-0.2464
19 CP8 198	-0.0706	-0.1239	-0.1617	-0.2073	-0.2797
20 CP8 208	-0.1016	-0.1411	-0.1613	-0.2087	-0.3096
21 CP8 218	-0.0960	-0.0330	-0.0132	-0.0221	-0.1241
22 CP8 228	-0.0407	0.0240	0.0382	0.0432	0.0186
23 CP8 238	0.0125	0.0493	0.0866	0.0917	0.0966
24 CP8 248	0.0430	0.0519	0.0535	0.0563	0.0599
25 CP8 258	0.0300	0.0165	0.0189	0.0175	0.0287

PAGE 1 SUMMARY FORCP, MOMENT

AEDC PROPULSION WIND TUNNEL
TRANSONIC 45

TEST PART M PT P RP10-6 VM Q TT WING RUN SURVEY
TC-484 70 1.025 1394.0 215.2 2.995 1050.7 525.3 79.4 40 3 1

ALPA	CLP	CV	CAP	CLWP	CLW	CLL	CAB
-3.02	-0.5614	-0.0023	0.0278	0.0201	-0.0003	0.0028	0.0078
-1.99	-0.7222	-0.0012	0.0306	0.0054	-0.0004	0.0028	0.0104
0.01	-0.0105	-0.0011	0.0320	0.0037	-0.0004	0.0023	0.0120
2.02	0.2067	-0.0013	0.0306	0.0030	-0.0004	0.0026	0.0103
5.02	0.5499	-0.0009	0.0244	-0.0121	-0.0005	0.0032	0.0096

PAGE 2 SUMMARY PRESSURES

AEDC PROPULSION WIND TUNNEL
TRANSONIC 42

TEST PART N PT P PR010-6 VM 0 72 WING PIV SURVEY 79.4 40 3 1
TC-404 76 1.025 1394.0 715.2 2.995 1060.7 525.3

PRESSURE COEFFICIENTS CP80(PB-P) / Q

ORIFICE	ALFA=5.02	ALFA=1.98	ALFA=0.01	ALFA=2.02	ALFA=9.02
1 CP8 1a	0.2023	0.1484	0.1224	0.0963	0.0494
2 CP8 2a	0.1012	0.0428	0.0305	0.0004	-0.0336
3 CP8 3a	0.0155	-0.0240	-0.0460	-0.0732	-0.0998
4 CP8 4a	-0.0077	-0.1069	-0.1231	-0.1455	-0.1640
5 CP8 5a	-0.1254	-0.1583	-0.1710	-0.1874	-0.2001
6 CP8 6a	-0.1078	-0.2700	-0.2276	-0.2322	-0.2314
7 CP8 7a	-0.1074	-0.2116	-0.2137	-0.2035	-0.1980
8 CP8 8a	-0.1321	-0.1464	-0.1469	-0.1356	-0.1190
9 CP8 9a	-0.0527	-0.1128	-0.1189	-0.1031	-0.0478
10 CP8 10a	0.1034	0.0535	-0.0099	-0.0274	0.0010
11 CP8 11a	0.2154	0.0081	0.0290	-0.0196	-0.0478
12 CP8 12a	0.2135	0.1085	0.0317	-0.0194	-0.0794
13 CP8 13a	0.1809	0.0917	0.0222	-0.0251	-0.1076
14 CP8 14a	0.1736	0.0859	0.0226	-0.0221	-0.1130
15 CP8 15a	0.1352	0.0569	-0.0016	-0.0443	-0.1350
16 CP8 16a	0.1040	0.0349	-0.0132	-0.0611	-0.1478
17 CP8 17a	0.0623	-0.0000	-0.0373	-0.0434	-0.1073
18 CP8 18a	0.0146	-0.0391	-0.0714	-0.1179	-0.1931
19 CP8 19a	-0.0304	-0.0801	-0.1073	-0.1524	-0.2233
20 CP8 20a	-0.0905	-0.0885	-0.0800	-0.1377	-0.2421
21 CP8 21a	-0.0257	-0.0008	0.0250	-0.0063	-0.0008
22 CP8 22a	-0.0141	0.0239	0.0434	0.0285	-0.0023
23 CP8 23a	-0.0045	0.0213	0.0364	0.0234	0.0105
24 CP8 24a	-0.0086	0.0116	0.0205	0.0089	0.0002
25 CP8 25a	-0.0207	-0.0192	-0.0132	-0.0210	-0.0371

PAGE 1 SUMMARY FORCE, MOMENT

AIRC PROPELLSION WIND TUNNEL
TRANSDUCIC AT

TEST PART 4 PT 1049 1388.0 491.7 2.998 1099.0 533.0 0 77 WIND RUN COVER 1

ALPA	CHP	CT	CAP	CLMP	CLW	CLL	CAS
-5.01	-0.5762	-0.0024	0.0304	0.0373	-0.0004	0.0025	0.0154
-1.98	-0.2211	-0.0015	0.0343	0.0155	-0.0004	0.0026	0.0146
0.01	-0.0042	-0.0017	0.0345	0.0037	-0.0004	0.0025	0.0142
2.01	0.2171	-0.0012	0.0327	-0.0083	-0.0004	0.0027	0.0148
5.00	0.5694	-0.0006	0.0276	-0.0276	-0.0005	0.0024	0.0165

PAGE 2 SUMMARY PRESSURES

ACDC PROPELLSION WIND TUNNEL
TRANSONIC AT

TEST PART 4 PT 37010-6 VM 0 17 WING RUN SURVEY
TC-484 70 1,000 1000.0 491.7 3,900 1000.0 933.0 79.1 40 3 1

PRESSURE COEFFICIENTS CPM(PS-P 1/4)

OFFICE	ALPHA=5.01	ALPHA=1.00	ALPHA=0.01	ALPHA=2.01	ALPHA=3.00
1 CPM 1a	0.2271	0.1793	0.1479	0.1185	0.0902
2 CPM 1a	0.1205	0.0860	0.0601	0.0393	0.0000
3 CPM 1a	0.0481	0.0170	-0.0112	-0.0225	-0.0364
4 CPM 1a	-0.0307	-0.0432	-0.0817	-0.0908	-0.1155
5 CPM 1a	-0.0830	-0.1008	-0.1212	-0.1314	-0.1475
6 CPM 1a	-0.1530	-0.1854	-0.1714	-0.1732	-0.1801
7 CPM 1a	-0.1921	-0.1919	-0.1971	-0.1932	-0.1936
8 CPM 1a	-0.0944	-0.0904	-0.0993	-0.0956	-0.0990
9 CPM 1a	-0.0802	-0.0705	-0.0668	-0.0614	-0.0700
10 CPM 1a	0.0766	-0.0093	-0.0361	-0.0413	-0.0428
11 CPM 1a	0.1908	0.0540	-0.0050	-0.0208	-0.0709
12 CPM 1a	0.1668	0.0352	-0.0063	-0.0378	-0.1137
13 CPM 1a	0.1376	0.0350	-0.0254	-0.0797	-0.1400
14 CPM 1a	0.1483	0.0326	-0.0303	-0.0808	-0.1891
15 CPM 1a	0.1226	0.0045	-0.0565	-0.1028	-0.1884
16 CPM 1a	0.1042	-0.0160	-0.0770	-0.1299	-0.2032
17 CPM 1a	0.0712	-0.0413	-0.0997	-0.1924	-0.2208
18 CPM 1a	0.0310	-0.0707	-0.1257	-0.1771	-0.2207
19 CPM 1a	-0.0086	-0.0501	-0.1135	-0.1604	-0.2019
20 CPM 1a	-0.0475	-0.0817	-0.1087	-0.1593	-0.2312
21 CPM 1a	-0.0326	-0.0426	-0.0376	-0.0473	-0.1131
22 CPM 1a	-0.0170	-0.0108	0.0160	0.0270	0.0102
23 CPM 1a	0.0179	0.0605	0.0999	0.0902	0.0600
24 CPM 1a	0.0301	0.0919	0.1004	0.0900	0.0703
25 CPM 1a	0.0108	0.0540	0.0805	0.0602	0.0307

ATAC PROPULSION WIND TUNNEL
TRANSDUCER 42

ALPHA	CMR	CT	CAP	FLVAT	CLP	CEL	CAB
-0.90	-0.3448	-0.0027	0.0324	0.0396	-0.0002	0.0034	0.0161
-1.04	-0.2157	-0.0018	0.0352	0.0169	-0.0003	0.0037	0.0196
0.01	-0.0068	-0.0014	0.0360	0.0044	-0.0003	0.0026	0.0180
2.02	0.2064	-0.0013	0.0346	-0.0086	-0.0004	0.0036	0.0182
3.01	0.3380	-0.0010	0.0329	-0.0289	-0.0005	0.0038	0.0170

PAGE 3 SUMMARY PRESSURES

AFSC PROPELLION WIND TUNNEL
TRANSONIC AT

WIND RUN SURVEY
77 40 3

TEST PART 1101 1370.3 94.0 3.003 1123.0 907.1 79.1 40 3

PRESSURE COEFFICIENTS COEFFICIENT 1/6

ORIFICE	ALPHA=4.00	ALPHA=1.00	ALPHA=0.01	ALPHA=2.02	ALPHA=5.01
1 CFS 10	0.2606	0.1900	0.1661	0.1305	0.1000
2 CFS 20	0.1479	0.1030	0.0760	0.0519	0.0187
3 CFS 30	0.0743	0.0332	0.0143	-0.0071	-0.0363
4 CFS 40	-0.0040	-0.0401	-0.0500	-0.0764	-0.0993
5 CFS 50	-0.0622	-0.0830	-0.0998	-0.1146	-0.1259
6 CFS 60	-0.1376	-0.1476	-0.1570	-0.1619	-0.1636
7 CFS 70	-0.1320	-0.1400	-0.1433	-0.1476	-0.1309
8 CFS 80	-0.0814	-0.0804	-0.0813	-0.0801	-0.0803
9 CFS 90	-0.0735	-0.0772	-0.0747	-0.0662	-0.0517
10 CFS 100	-0.0184	-0.0280	-0.0333	-0.0150	-0.0126
11 CFS 110	0.1032	0.0840	0.0355	-0.0024	-0.0348
12 CFS 120	0.2108	0.1690	0.0470	-0.0005	-0.0597
13 CFS 130	0.1900	0.0944	0.0322	-0.0240	-0.0911
14 CFS 140	0.1001	0.0873	0.0378	-0.0312	-0.0993
15 CFS 150	0.1416	0.0703	0.0073	-0.0400	-0.1167
16 CFS 160	0.1406	0.0404	-0.0006	-0.0376	-0.1169
17 CFS 170	0.1053	0.0429	-0.0073	-0.0521	-0.1409
18 CFS 180	0.0647	0.0036	-0.0353	-0.0972	-0.1025
19 CFS 190	0.0217	-0.0432	-0.0933	-0.1394	-0.1946
20 CFS 200	-0.0240	-0.0896	-0.1321	-0.1891	-0.2011
21 CFS 210	-0.0423	-0.0803	-0.1228	-0.1680	-0.2177
22 CFS 220	-0.0415	-0.0543	-0.0670	-0.0775	-0.0864
23 CFS 230	-0.0503	-0.0435	-0.0333	-0.0066	-0.0031
24 CFS 240	-0.0380	-0.0050	0.0000	0.0170	0.0233
25 CFS 250	-0.0306	-0.0152	-0.0000	-0.0073	-0.0077

PAGE 1 SUMMARY FORCE, MOMENT

AEDC PROPELLSION WIND TUNNEL
TRANSONIC 40

TEST BODY N PT P PR10-6 VM TT WING SUR SURVEY
TC-404 01 1.152 1371.7 401.0 1.001 1165.5 559.0 79.3 40 3 1

ALFA	CWP	CV	CAP	CLW	CLX	CLL	CAB
-3.00	-0.3200	-0.0026	0.0320	0.0504	-0.0001	0.0019	0.0170
-2.00	-0.3122	-0.0010	0.0340	0.0223	-0.0002	0.0021	0.0163
0.01	-0.0102	-0.0010	0.0357	0.0061	-0.0003	0.0022	0.0100
2.02	0.1962	-0.0016	0.0330	-0.0111	-0.0003	0.0024	0.0171
5.03	0.5210	-0.0009	0.0295	-0.0300	-0.0004	0.0024	0.0101

PAGE 2 SUMMARY PRESSURES

TEST PART 27 P 27010-6 VM 0 TT WING RUN SURVEY
TC-404 01 1.159 1371.2 601.9 3.001 1165.5 599.0 79.5 40 3 1 AEDC PROPELLSION WIND TUNNEL
TRANSONIC 47

PRESSURE COEFFICIENTS C_{PS}(C_{PS}-P 1/8)

ORIFICE	ALPHA=5.00	ALPHA=2.00	ALPHA=0.01	ALPHA=2.02	ALPHA=5.02
1 C _{PS} 10	0.2470	0.1000	0.1693	0.1449	0.1041
2 C _{PS} 20	0.1506	0.1106	0.0813	0.0518	0.0194
3 C _{PS} 30	0.0806	0.0430	0.0201	-0.0015	-0.0208
4 C _{PS} 40	0.0042	-0.0263	-0.0466	-0.0684	-0.0772
5 C _{PS} 50	-0.0606	-0.0728	-0.0875	-0.0896	-0.1103
6 C _{PS} 60	-0.1179	-0.1218	-0.1334	-0.1442	-0.1407
7 C _{PS} 70	-0.1088	-0.1172	-0.1260	-0.1317	-0.1213
8 C _{PS} 80	-0.0602	-0.0722	-0.0805	-0.0750	-0.0781
9 C _{PS} 90	-0.0628	-0.0626	-0.0406	-0.0236	-0.0314
10 C _{PS} 100	-0.0317	-0.0296	-0.0233	-0.0275	-0.0220
11 C _{PS} 110	0.1044	0.0414	0.0104	-0.0150	-0.0300
12 C _{PS} 120	0.1039	0.0833	0.0330	-0.0094	-0.0683
13 C _{PS} 130	0.1013	0.0808	0.0219	-0.0265	-0.0935
14 C _{PS} 140	0.1797	0.0885	0.0273	-0.0304	-0.0980
15 C _{PS} 150	0.1413	0.0620	0.0016	-0.0491	-0.1157
16 C _{PS} 160	0.1459	0.0622	0.0038	-0.0320	-0.1250
17 C _{PS} 170	0.1166	0.0376	-0.0203	-0.0725	-0.1361
18 C _{PS} 180	0.0071	0.0150	-0.0385	-0.0685	-0.1340
19 C _{PS} 190	0.0493	-0.0156	-0.0635	-0.1125	-0.1763
20 C _{PS} 200	0.0184	-0.0580	-0.1038	-0.1495	-0.2092
21 C _{PS} 210	-0.0106	-0.0494	-0.0895	-0.1200	-0.1797
22 C _{PS} 220	-0.0055	-0.0237	-0.0371	-0.0534	-0.0730
23 C _{PS} 230	-0.0140	-0.0060	-0.0102	-0.0070	0.0131
24 C _{PS} 240	-0.0138	-0.0015	0.0226	0.0510	0.0423
25 C _{PS} 250	0.0271	0.0390	0.0346	0.0265	0.0143

PAGE 2 SUMMARY PRESSURES

TEST PART M PT RE-10-6 VM 0 TT WING RUN SURVEY
 TC-404 945 0.025 1442.5 830.2 2.903 973.6 495.8 80.7 68 5 1
 AEDC PROPULSION WIND TUNNEL
 TRANSONIC 02

PRESSURE COEFFICIENTS CPs (CPs-P) / 0

ORIFICE	ALFA-5.01	ALFA-1.90	ALFA-0.02	ALFA-2.01	ALFA-5.01
1 CPs 1a	0.1304	0.0974	0.0547	0.0279	-0.0139
2 CPs 2a	0.0424	-0.0050	-0.0343	-0.0550	-0.0904
3 CPs 3a	-0.0321	-0.0756	-0.1015	-0.1173	-0.1441
4 CPs 4a	-0.0049	-0.1358	-0.1565	-0.1665	-0.1794
5 CPs 5a	-0.1035	-0.1330	-0.1465	-0.1449	-0.1393
6 CPs 6a	-0.0238	-0.0443	-0.0531	-0.0477	-0.0390
7 CPs 7a	-0.0085	-0.0313	-0.0391	-0.0305	-0.0163
8 CPs 8a	0.0478	0.0361	0.0215	0.0215	0.0234
9 CPs 9a	0.1054	0.0446	0.0415	0.0298	0.0120
10 CPs 10a	0.1507	0.0878	0.0501	0.0197	-0.0209
11 CPs 11a	0.1336	0.0560	0.0085	-0.0363	-0.1145
12 CPs 12a	0.0951	0.0132	-0.0403	-0.0925	-0.1862
13 CPs 13a	0.0727	-0.0142	-0.0703	-0.1271	-0.2273
14 CPs 14a	0.0451	-0.0391	-0.0971	-0.1553	-0.2571
15 CPs 15a	0.0048	-0.0802	-0.1433	-0.2007	-0.3002
16 CPs 16a	-0.0083	-0.0872	-0.1569	-0.2313	-0.3299
17 CPs 17a	-0.0087	-0.0592	-0.0815	-0.1759	-0.3609
18 CPs 18a	0.0140	-0.0132	-0.0249	-0.0275	-0.1385
19 CPs 19a	0.0448	0.0309	0.0237	0.0300	0.0230
20 CPs 20a	0.0547	0.0447	0.0407	0.0484	0.0562
21 CPs 21a	0.0561	0.0483	0.0431	0.0500	0.0600
22 CPs 22a	0.0493	0.0377	0.0325	0.0400	0.0478
23 CPs 23a	0.0408	0.0283	0.0231	0.0281	0.0336
24 CPs 24a	0.0283	0.0168	0.0111	0.0157	0.0179
25 CPs 25a	-0.0174	-0.0257	-0.0313	-0.0253	-0.0275

PAGE 1 SUMMARY FORCE, MOMENT

AEDC PROPULSION WIND TUNNEL
SPANSONIC 47

TEST PART M PT P PR10-6 VM TT WING RW SURVEY
TC-494 946 0.973 1432.2 780.2 2.967 1020.4 317.5 34.3 60 6 1

ALFA	CUP	CV	CIV	CLMP	CLP	CLL	CAN
-5.01	-0.5530	-0.0014	0.0344	0.0191	-0.0002	0.0006	0.0093
-1.90	-0.7090	-0.0009	0.0346	0.0013	-0.0001	0.0007	0.0099
0.02	-0.0057	-0.0012	0.0346	-0.0008	-0.0001	0.0006	0.0101
2.01	0.2021	-0.0010	0.0328	-0.0025	-0.0001	0.0004	0.0100
5.01	0.5521	-0.0012	0.0379	-0.0261	0.0000	0.0006	0.0094

PAGE 1 SUMMARY FORCE. MOMENT

TEST	PART	W	PT	P	WFOLO-S	W	TS	WING	NUM	AEBC
TC-004	949	1.024	1421.7	730.1	2.990	1065.0	536.0	86.0	6	PRODUCING WIND TUNNEL
										TRANSONIC 47
ALFA	CHF	CT	CAP	CLUP	CLW	CLL	CAN			
-3.01	-0.5569	-0.0012	0.0345	0.0394	-0.0002	0.0005	0.0075			
-1.90	-0.3104	-0.0010	0.0301	0.0073	-0.0003	0.0004	0.0005			
0.00	-0.0077	-0.0007	0.0397	-0.0002	-0.0001	0.0007	0.0000			
2.02	0.2082	-0.0007	0.0379	-0.0070	-0.0002	0.0006	0.0075			
5.01	0.5459	-0.0009	0.0314	-0.0290	-0.0001	0.0006	0.0005			

PAGE 2 SUMMARY PRESSURES

AEDC PROPELLION WIND TUNNEL
TRANSONIC 45

TEST PART 4 PT 9 PROLOG VM 4 TT WING RUN SURVEY

TC-484 947 1.024 1421.7 390.1 3.900 1064.9 336.0 85.0 5 1

PRESSURE COEFFICIENTS CP85(P8-P) 1/8

QUIPCT	ALP8=5.01	ALP8=1.99	ALP8=0.00	ALP8=2.03	ALP8=5.01
1 CP8 1a	0.2021	0.1560	0.1227	0.0959	0.0937
2 CP8 2a	0.0974	0.0554	0.0359	0.0337	-0.0355
3 CP8 3a	0.0144	-0.0232	-0.0485	-0.0480	-0.0094
4 CP8 4a	-0.0714	-0.1044	-0.1253	-0.1407	-0.1053
5 CP8 5a	-0.1200	-0.1555	-0.1717	-0.1824	-0.2001
6 CP8 6a	-0.2030	-0.2217	-0.2204	-0.2282	-0.2314
7 CP8 7a	-0.2030	-0.2115	-0.2105	-0.2191	-0.2197
8 CP8 8a	-0.1412	-0.1461	-0.1402	-0.1261	-0.0911
9 CP8 9a	0.0937	-0.0553	-0.0339	-0.0127	0.0019
10 CP8 10a	0.2711	0.1348	0.0944	0.0713	0.0321
11 CP8 11a	0.2101	0.1292	0.0793	0.0412	-0.0143
12 CP8 12a	0.1846	0.0993	0.0486	0.0063	-0.0495
13 CP8 13a	0.1607	0.0537	0.0243	-0.0240	-0.1033
14 CP8 14a	0.1338	0.0334	0.0038	-0.0379	-0.1379
15 CP8 15a	0.0845	0.0101	-0.0356	-0.0825	-0.1047
16 CP8 16a	0.0493	-0.0226	-0.0680	-0.1129	-0.1818
17 CP8 17a	0.0142	-0.0372	-0.1031	-0.1464	-0.2256
18 CP8 18a	-0.0147	-0.0834	-0.1324	-0.1750	-0.2530
19 CP8 19a	-0.0323	-0.0642	-0.1462	-0.1931	-0.2703
20 CP8 20a	-0.0455	-0.0812	-0.1212	-0.1713	-0.2746
21 CP8 21a	-0.0278	-0.0095	-0.0056	-0.0252	-0.1037
22 CP8 22a	-0.0199	0.0131	0.0196	0.0300	-0.0099
23 CP8 23a	-0.0177	0.0100	0.0162	0.0199	0.0073
24 CP8 24a	-0.0183	0.0082	0.0077	0.0121	0.0025
25 CP8 25a	-0.0302	-0.0234	-0.0192	-0.0119	-0.0235